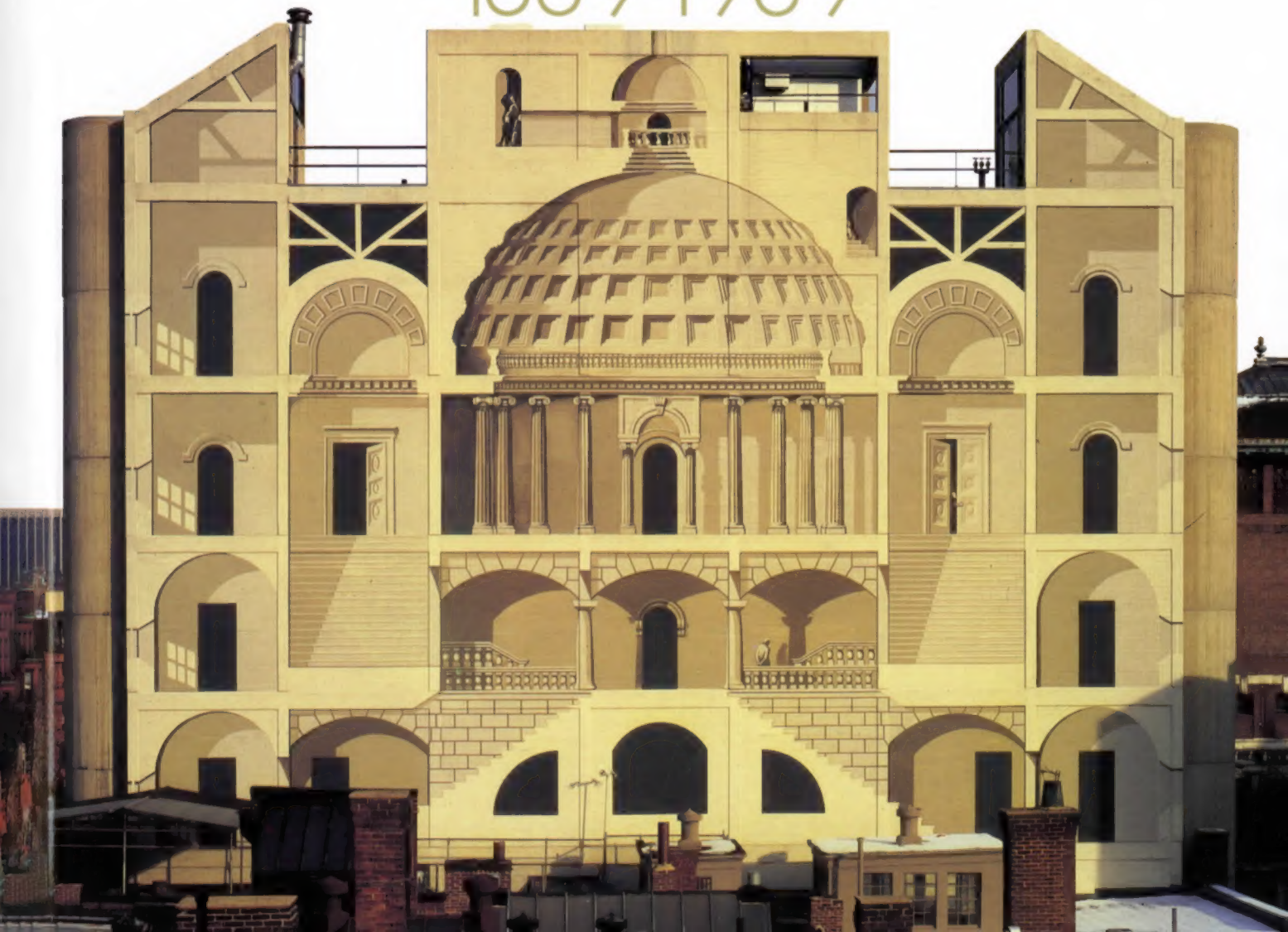


MARGARET HENDERSON FLOYD

**ARCHITECTURAL
EDUCATION
AND BOSTON** CENTENNIAL
PUBLICATION
OF THE BOSTON
ARCHITECTURAL
CENTER
1889-1989



ARCHITECTURAL EDUCATION AND BOSTON



**ARCHITECTURAL
EDUCATION
AND BOSTON** CENTENNIAL
PUBLICATION OF
THE BOSTON
ARCHITECTURAL CENTER • 1889–1989

Margaret Henderson Floyd

with Highlights of 100 years by Architects and Historians

BOSTON ARCHITECTURAL CENTER BOSTON, MASSACHUSETTS

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Library of Congress Catalog Card Number 89-062774

Hardbound: ISBN 0-9624098-0-4 Paperback: ISBN 0-9624098-1-2

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Published in the U.S.A. by the Boston Architectural Center 320 Newbury Street, Boston, Massachusetts

Published by the Boston Architectural Center with the help of a contribution from the Boston Globe Foundation.

Designed by David Ford

Typesetting by DEKR Corporation, Woburn, Massachusetts.

Printed and bound by Eastern Press, Inc., New Haven, Connecticut.

DEDICATED TO THE MEMORY OF

WALTER MUIR WHITEHILL

WHO KNEW THAT

ARCHITECTS AND HISTORIANS

MUST WORK TOGETHER

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PREFACE

For five years, Frank Adams's B.A.C. Library Committee has discussed the idea for a book commemorating the centennial of the Boston Architectural Club/Center. Frank's commitment to making this publication happen and Bob Sturgis's tireless efforts on its behalf have been essential to the completion of the present volume and an inspiration to us all. Appreciation is due also to Hugh Shepley, chairman of the B.A.C. Centennial Committee, and to President Bernard Spring for their support and interest over many months.

The volume which follows is drawn from both recorded and remembered history. In the first chapter I have sketched initially the history of architectural education in Boston and its relationship to the city, culminating with America's first school of architecture at M.I.T. In Chapter Two my colleague Cynthia Zaitzevsky has recounted the parallel rise of landscape architecture in the nineteenth century. My third chapter reviews the later founding of Harvard's architectural program and of the Boston Architectural Club and its initial constituency.

In the essays following, those whose careers are traced or whose reminiscences appear came to architecture in the late 1920s and early 1930s. All thus share a training in the Beaux-Arts system of architectural education. Within their professional lifetimes all came to terms with Modernism, which turned the objectives of their training upside down. The group is particularly significant relative to the development of architectural education in Boston, in that each member has been involved in architectural education or has practiced in Boston. Some have contributed their own material; others I have represented in a series of essays that focus on the significance of their architectural education. In Chapter Five are essays that bring together the new importance of urban design and architecture in the years following World War II and the new role of the Boston Architectural Center during Boston's renaissance of recent decades. Dr. Cynthia Zaitzevsky and Professor Charles Harris have both contributed essays on the history of landscape architecture. Except for their sections, I have added the notes to the text. Where a note has been furnished by a contributor, this fact will be indicated in the note.

I am grateful in particular to Susan Lewis, B.A.C. librarian, who over many years has organized the archives of the institution and evinced a longstanding interest in its history. Thanks to her and her associate Sarah Dickinson for continuing assistance in making materials from the B.A.C. collection available to me and to my students. Michael Yeates, curator, and Warren Seamans, director of the M.I.T. Museum, have spared no efforts to provide heretofore unpublished visual resources from their collection. Joseph Hodgson, fellow member of the B.A.C. Library Committee and librarian of the Graduate School of Design at Harvard, has made records available at the Loeb Library and has contrib-

uted valuable advice at various stages of planning the publication. Harry Katz of the Boston Athenaeum, a graduate student at Tufts University, has been tireless in checking references and spearheading the selection of illustrations, many from the Athenaeum's rich collection; Janice Chadbourne of the Fine Arts Department of the Boston Public Library has provided materials from the William Gibbons Preston Drawings Collection. Clive Russ photographed most of these original drawings and copied other materials here reproduced. The experience and skilled vision of David Ford, its designer, have added immeasurably to the quality of this publication.

Above all, many thanks to my Tufts students Janet Comey, Ann Clifford and John Matteo for their patient and inspired combing of records of the Boston Architectural Center and other Boston libraries over the past year, and to Linda Haverty for editing the manuscript and for her many other contributions. Hildegard Blom's help in organization of communications, people, and material, and her manuscript management with Rinus Vermeulen have made possible its production on schedule. William Floyd has supervised overall planning and made available the facilities of Ruskin Data Systems, without which this volume would not have been published for the centennial celebrations of the Boston Architectural Center.

I am grateful especially to each and every contributor, and to colleagues too numerous to mention, who in large and small ways, by sharing their ideas and experiences have given me a wide perspective on this subject; because of them I believe this volume presents significant insight into the history of Architectural Education in Boston and its professional effects over the past one hundred years.

Margaret Henderson Floyd

Weston, Massachusetts
October, 1989

INTRODUCTION

Margaret Henderson Floyd

There are three architectural schools in Boston: the Massachusetts Institute of Technology (M.I.T.), founded in 1866, the Boston Architectural Club, founded in 1889, and the Harvard Graduate School of Design, founded in 1893. The Boston Architectural Club is now known as the Boston Architectural Center (B.A.C.); it has recently become unique as America's only independently accredited architectural school. The B.A.C. centennial thus presents an occasion to step back and review one hundred years of architectural education in Boston, in particular the impact of these educational systems on architects and in turn their impact on the city. The B.A.C. has been remarkable for consistency of purpose throughout its first century; the original Club was founded as a means of bringing together Boston's architects, young draughtsmen moving into the profession, and those in allied fields. The Club sponsored design classes, lectures and a variety of sketching trips, exhibitions and other social events. Today the B.A.C. preserves that vision of apprenticeship through transmission by contact. Moreover, the Center addresses the most ancient challenge of architectural education: the alignment of designers with the real world of building production and construction. With a faculty still comprised for the most part of volunteers from the profession, the B.A.C. promotes education through combined work and study. Matriculating in the evenings over a six-year period (in comparison to five in a standard academic institution), the B.A.C. student is required to have three years work experience in architectural offices. The staying power of this apprenticeship concept and of the B.A.C. itself is notable. In the beginning, it was but one of a number of architectural clubs in major eastern cities; New York, Philadelphia, Pittsburgh, and St. Louis all shared roughly similar programs. But no other club has aspired to the educational objectives which, in the long run, seem particularly appropriate to the Boston club; through its role as an educational institution, the Boston Architectural Club has had a long and influential history.¹

The development of institutional architectural education in America began at M.I.T., which first admitted students in 1867. This institution has been complemented over the past hundred years by the remarkable contribution of the Boston Architectural Club. Its history reveals an educational vision which has served as a center of gravity for Boston's larger architectural community, for architects educated at M.I.T. and Harvard after 1893, and for those coming to Boston from elsewhere, for students entering the profession and those in allied fields. The essence of the twentieth-century B.A.C. program has changed little since 1889; the design classes held in the earlier B.A.C. building at 16 Somerset Street focused on studio as the center of the curriculum, and the same

is true at 320 Newbury Street today, where the program now attracts a national and international constituency.

In the polarization of Boston's architectural education which ensued after the appointment of Walter Gropius at Harvard in 1936, the Club performed tasks far greater than dreamed by its early founders. It served as an educational environment in which various elements of the architectural community could touch base and exchange ideas, becoming in the 1940s "the Center."

Artist/architects have had a consistent record of leadership in Boston over the past hundred years, and the 1967 B.A.C. building symbolizes its institutional purpose. An intruder in the sedate Back Bay, the aggressive concrete building has been integrated into the cityscape by Richard Haas's 1974 mural painting to become a true metaphor for the program of the Center, that combination of building and drawing which is ultimately the language of architecture. The B.A.C. building presents two faces, but stands as the paradigm of architectural education and Boston.

The city of Boston has not only weathered, but been enhanced by the ebb and flow of architectural education, philosophy and genius. Although the work of Boston's best-known architects, Charles Bulfinch, H. H. Richardson, I. M. Pei or Hugh Stubbins has been published, the relationship of these architects to their peers and even more, the influence of Boston ideals on the larger history of American architecture has yet to be fully explored. For example, in the booming third quarter of the nineteenth century, national standards for design were set through the fame of H. H. Richardson, the development opportunity of the Back Bay, and the publication in Boston of *The American Architect and Building News*.² The first educational program in Landscape Architecture was established at Harvard in 1900 by the son of Frederick Law Olmsted, whose work changed the shape of America. But in the early twentieth century, the effects of economic recession and the Depression on architecture were aggravated by the limited geographical extent of the Boston peninsula. So Boston architects built elsewhere, particularly in the late nineteenth and early twentieth centuries. The national extent of that design network has yet to be recorded, but it includes Riverside Church and the Cloisters, the U.S. Military Academy at West Point, the Cathedral of St. John the Divine in New York, Washington Cathedral in Washington D.C., the Carnegie Institute in Pittsburgh, Stanford and Rice Universities, the University of Chicago, Colonial Williamsburg, the Nebraska State Capitol in Lincoln, Balboa Park in San Diego, California, and most of the park systems of the nation.³ Notwithstanding Boston's limitation as a site for building, educational influences generated in the city have impacted architectural ideals on both a professional and a popular level nationwide through most of the twentieth century. Architectural theory in Boston is thus as interesting and worth considering as its individual architects or buildings.

On the threshold of the twenty-first century, rather than recording the history of specific curricular reform, this book examines the changing interface between architectural education and Boston. The B.A.C. has provided the common ground where much of this drama has taken place, and its centennial presents an opportunity to trace the larger history of the architectural ideas that fueled these changes. The views of Boston's systems of formal architectural education afforded by this study have also yielded glimpses of the cultural impulses of the city which led to the creation of its institutions.

ARCHITECTURAL EDUCATION AND BOSTON

1 ARCHITECTURAL EDUCATION AND BOSTON TO 1899

Margaret Henderson Floyd

The profession is, at present, in the hands of mechanics, many of whom are first-rate; of contractors and superintendents, who are mechanics with a talent for affairs, and many of whom take the name of architects; of architects proper, few of whom have an adequate training in the higher branches of their calling, while they are, of course, vastly inferior to the others in a knowledge of the lower branches; and, lastly, of architects' assistants and draughtsmen. It is upon these last that the whole system turns; and in any community the character of the work done depends, in a great degree, upon their attainments and qualifications.¹ —William Robert Ware

INTRODUCTION

The academic or institutional education of the American architect was first established at the Massachusetts Institute of Technology (M.I.T.) in 1867.² This marked the official intrusion of architectural influence from France into the educational system in Boston, because the M.I.T. curriculum was based on the model of the Ecole des Beaux-Arts in Paris, setting the pattern for American architectural education until the 1930s. But in the Boston profession and the city itself, an explicit and longstanding affiliation with English models that had been current since colonial days persisted. Unquestionably it held sway amongst the Boston Society of Architects (B.S.A.), which was also founded in 1867. While M.I.T.'s French-based program would launch a new approach to architecture, the English models upheld by the B.S.A. and its patrons influenced the sorts of buildings that were designed. Dissemination of this English influence was enhanced by the educational programs and classes of the new Museum of Fine Arts, drawn from those of the South Kensington Museums of Science and Art in London and focussed on the decorative arts. Between 1870 and 1876 the museum building rose on Art Square (Copley Square after construction of the Boston Public Library, 1887–1895); its terra-cotta ornament and Ruskinian Gothic style announced the English orientation of its programs, while the cast collection and galleries were available for M.I.T. sketching and classes.³

After 1870 the profession itself began to include graduates of the M.I.T. School and increasing numbers of men (there were no women until the 1880s) who had studied in Paris at the Ecole des Beaux-Arts. An English image persisted more consistently than anywhere else in the country, however, in both the style of the buildings in the Back Bay and the expertise of Boston's most prominent architectural firms. An affinity for English Colonial forms consequently distinguished and controlled Boston architecture until the 1930s.

1.1 HOUSEWRIGHTS AND ENGINEERS: 1620–1850

The Housewrights

During the three-and-one-half centuries of Boston's history, its epochs of construction have been comparatively well defined, but the interaction between them is unclear. The seventeenth-century housewright emigrating to Massachusetts Bay recreated the vernacular rather than the high-style architecture of England. His innovative constructional design solutions transferred a British masonry building system into the native timber of New England to achieve one of the great moments in the history of American architecture.⁴ Despite the eventual success of seventeenth-century solutions to functional problems (wood was plentiful, easily worked and an ideal insulating material from the cold), considerable adjustment between the English model and the American application was required from the start. Harvard Hall I in Cambridge (1638–1644), for example, was short-lived due to its carpenters placing the wooden sills and foundation directly on the ground.⁵ That Boston architects for the first forty years of the twentieth century should have continued to focus upon reassessment and historical investigation of seventeenth- and eighteenth-century English and American buildings for inspiration is not without importance to the history of architectural education in Boston.⁶

Publications of the Boston Architectural Club reflect this colonial preoccupation; Batty Langley's English pattern-book *The City and Country Builder's and Workman's Treasury of Designs: Or the Art of Drawing and Working the Ornamental Parts of Architecture* (1750), was reproduced verbatim in the 1922 Yearbook. The perfection of the domestic vernacular form has been an ongoing theme of Boston architecture, along with a continuing focus on English architectural models that has produced visual continuity in the city.⁷ The foundation of the Society for the Preservation of New England Antiquities (S.P.N.E.A.) by William Sumner Appleton laid the groundwork in the 1920s for the unexpected explosion of the historic preservation movement in Boston and



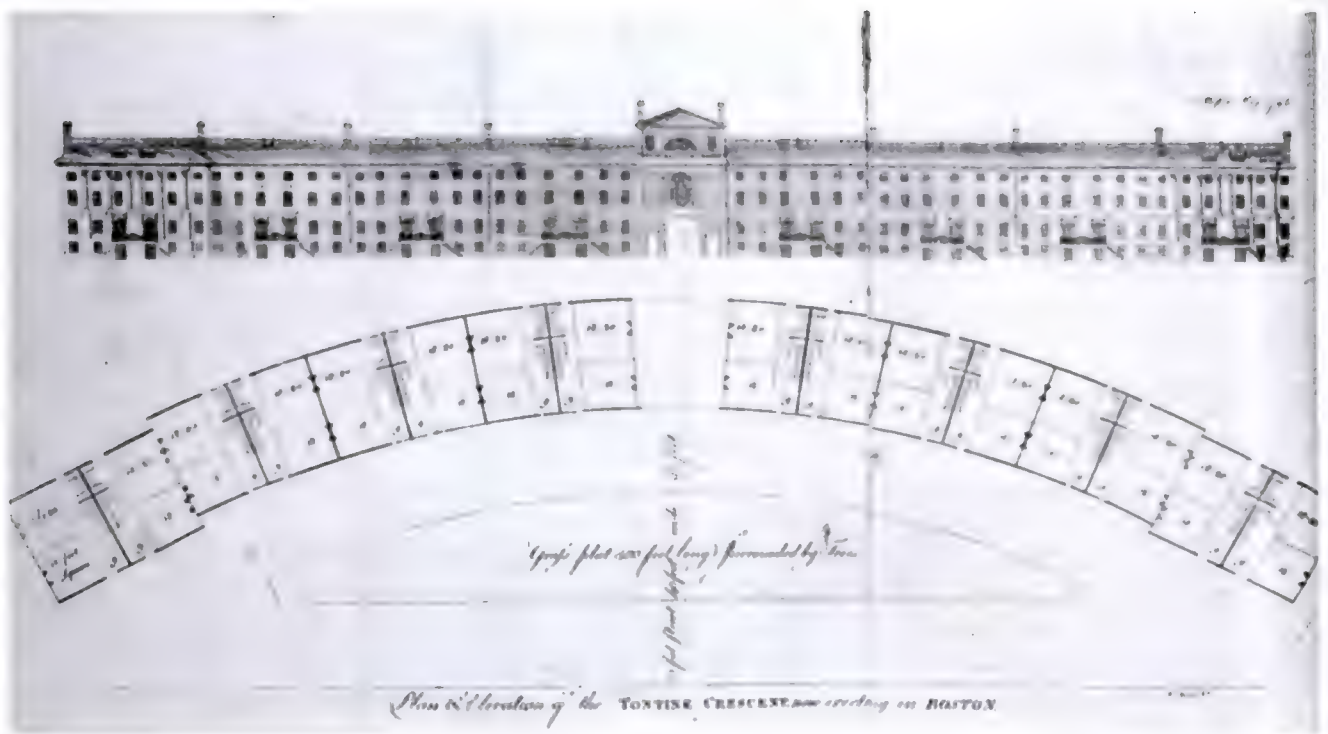
The Old College, Harvard Hall I, Harvard University, Cambridge (1638–1644): north elevation. The early carpenters of Harvard Hall continued an English system of seventeenth-century medieval construction, for a building which soon deteriorated because of its inadequate foundations, since the wood was placed directly on the ground.

Cambridge in the 1960s (see Stahl, Chapter 5.3). Isidor Richmond, president of the B.A.C. and B.S.A., in his Tercentenary A.I.A. speech "Going Modern," acknowledges the persistence of the past.⁸ That the remains of Colonial days, and also a vibrant nineteenth-century heritage from Bulfinch to Richardson existed everywhere in Boston, has provided both constraint in experimentation with new design and a consistent source of inspiration; the existing environment could not long be ignored by architects or clients in Boston.

The introduction of *avant-garde* European architectural education and styles in both the nineteenth and the twentieth centuries has been particularly traumatic for Boston in comparison to other American cities. Yet it was here that Modernism was first accepted educationally, when Walter Gropius was appointed as the head of Harvard's Architectural School in 1936.⁹ At that time, professional education for the architect was a mere seventy years old in America. In Boston, the prosperity of a growing maritime trade in the eighteenth century had extended reliance on the housewright/architect who, albeit more senior and more skilled, had continued to do the job. Unlike other cities to the south such as Philadelphia and Washington and Baltimore, which imported French and German architects, Boston retained its native builders, skilled woodworkers, armed with copies of Gibbs, Palladio and Batty Langley, well beyond the Revolution and into the nineteenth century.¹⁰

Even the earliest professional contributions to Boston architecture in the 1740s remained exclusively English. The painter John Smibert, who designed Faneuil Hall and Harvard's Holden Chapel in 1742, and Peter Harrison, a gentleman who had studied architecture in England and designed King's Chapel, Boston (1749) and Christ's Church, Cambridge (1757), set a standard of proportion and finesse that was locally unequalled.¹¹ The fine, horizontal proportions of these public buildings with their heavy, Georgian entablatures were exceeded only by the advanced design of Harvard Hall III (1764), for which Massachusetts governor Francis Bernard provided an initial drawing; its more elegant proportions anticipated the post-Revolutionary work of Bulfinch.¹² So, through the good offices of an Englishman from Providence, a local English-born artist and the English governor, Boston's most accomplished pre-Revolutionary buildings were executed. Charles Bulfinch's trip to Europe immediately after independence in the 1770s, provided the first professional intrusion into the heretofore undisturbed relationship of the accomplished housewright and his local patronage, but focussed exclusively on English models.¹³

The age of Bulfinch, which ran from the mid-1780s to his departure for Washington in 1818, was extraordinary. The shape of the peninsula changed as the tri-mountain of Beacon Hill was lowered and that area developed into a residential district, where Bulfinch introduced the new high style of the Adam brothers then popular in London.¹⁴ The appearance of buildings changed substantially as well, for sheer, brick walls and delicate, white carving replaced the heavy Georgian proportions of the colonial era. But it was in the planning accomplishments of the federal period that a theme of contextuality was established which has resurged repeatedly in Boston architecture and has given the city its present character. Bulfinch's buildings trace the evolution of both his style and the westerly development of the peninsula.¹⁵ Already, before he left in 1818 to become architect of the United States Capitol in Washington D.C., infill housing was appearing between his mansions on Park and Beacon



Streets, so that the continuous streetscape which characterizes the city today was emerging.¹⁶ This concept was hardly foreign to Bulfinch's own thinking, for his disastrous Tontine Crescent (1794) development was based upon John Nash's great squares of attached housing in early nineteenth-century London.¹⁷ Meanwhile, Samuel McIntire, woodcarver of Salem (and his peers of lesser talent) reconfigured the delicate fanlights and columns of Bulfinch into a new American tradition.¹⁸ So in Bulfinch's day, few educated architects were at work, and the major force for design still came through pattern books.¹⁹ The western Massachusetts housewright Asher Benjamin produced in 1797 his *American Builder's Companion*, the first of a great series of pattern books that served as the educational vehicle for distributing Bulfinch's design ideas to both rural and urban America.²⁰ Thus in late eighteenth-century Boston the housewright/architect was, by and large, reapplying pattern book forms as in colonial times, rather than drawing upon a formal architectural education.

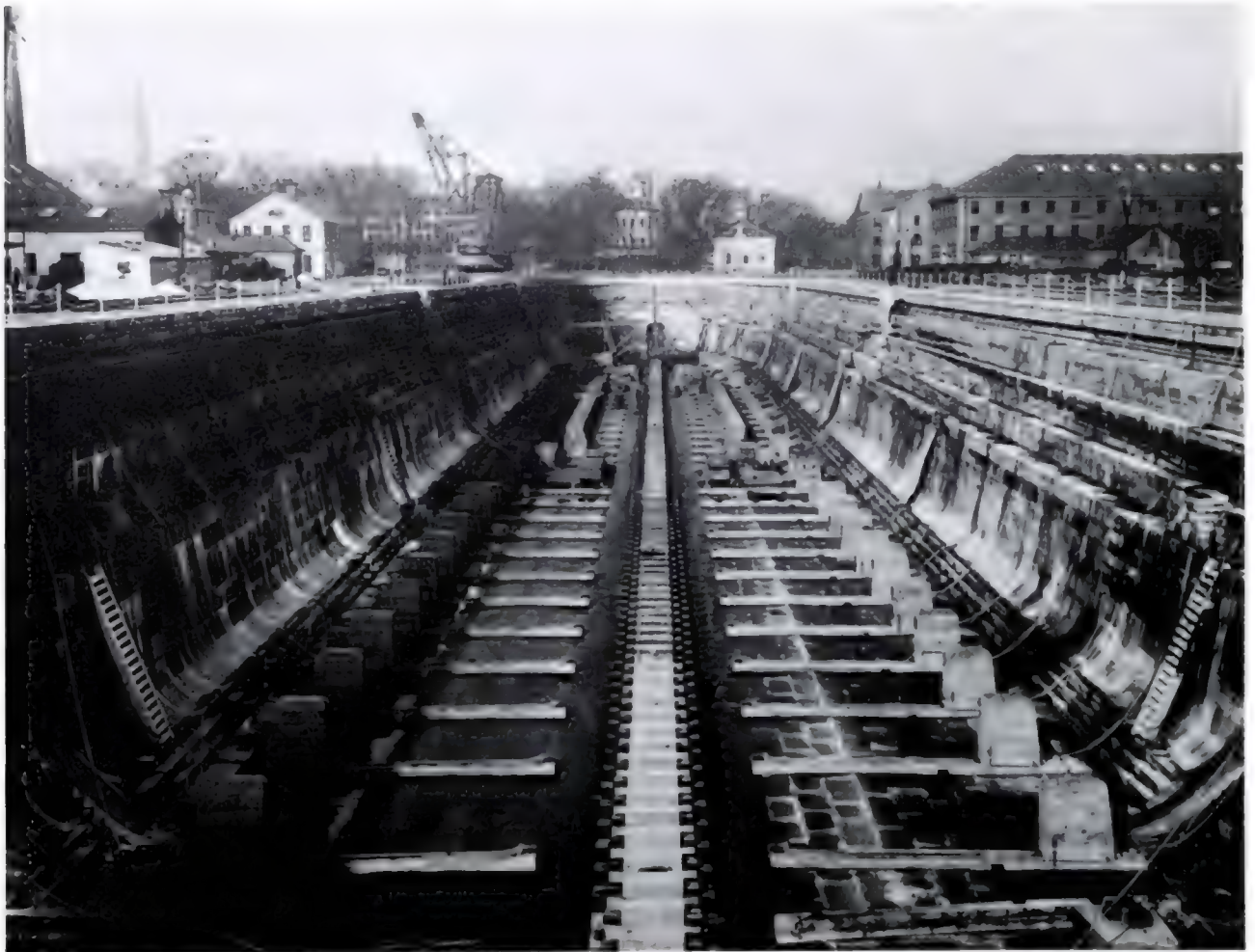
But the success and longevity of the housewright as a designer has been the salient phenomenon of New England architecture. The architectural forms these housewrights created have been incorporated into both the popular and professional educational system, disseminating the New England image throughout the country, even into the late twentieth century. And the B.A.C. has played its role in establishing this heritage. The results of the transformation of the British building system into wood, spurred on by the genius of the New England wood carver, comprised the entire *Yearbook of the Boston Architectural Club* of 1918, carrying photographs of Salem's Colonial and Federal houses. Little surprise it is, then, that Boston architecture of the 1930s, led by the work of Perry, Shaw & Hepburn in Colonial Williamsburg (see Chapter 4.2), should in fact set the standard for the nation at the time of the Tercentennial, just as Walter Gropius arrived at Harvard.²¹

Tontine Crescent, Boston (Charles Bulfinch, 1794): plan and elevation. Charles Bulfinch, returning to Boston from England confronted the congestion which existed on the limited land of the Boston peninsula. Emulating the planning of London by John Nash and others, he introduced the concept of attached housing at the Tontine Crescent, a project in which he lost his fortune.

The Engineers

The geographical constriction of the Boston peninsula provided the impetus for invention and for the direction of what architectural education existed in the early nineteenth century. The accomplishments of Boston's architects of the granite age, most of whom were educated under Loammi Baldwin, Jr. (1780–1838) during construction of the Charlestown Navy Yard, were significant. A creature of the Enlightenment, Baldwin was the son of General Loammi Baldwin, Revolutionary hero who developed both the Baldwin apple and the vulcanizing process for rubber.²² As an engineer the younger Baldwin, a graduate of Harvard College, was charged with the governmental works at the Charlestown Navy Yard. There he trained a group of talented men whose names are familiar: Alexander Parris, Solomon Willard, Ammi B. Young and Isaiah Rogers. It was their expertise which made possible the first extension of the Boston peninsula on the waterfront; stone was obtained for the first time via the granite railway which carried it from a quarry in Quincy to the sea and thence to Boston.²³ But because it was almost entirely built up by 1830, only a few new granite buildings could actually be erected on the peninsula. Alexander Parris designed the Quincy Markets (1822–1825) extending outward beyond Dock Square and parallel to State Street on newly created, filled land. The monolithic

Charlestown Navy Yard, Charlestown laid out by Loammi Baldwin, Jr. (1828), seen from drydock no. 2 (1899–1904). In Boston the interface of engineering with architecture escalated in the nineteenth century. The Charlestown Navy Yard, was laid out under the engineering direction of Loammi Baldwin, Jr. A generation of Boston architects were trained as a result, including Alexander Parris, Solomon Willard, and George M. Dexter. The extension of the Boston peninsula waterfront with the Quincy Markets was made possible by engineering skills developed in Charlestown.

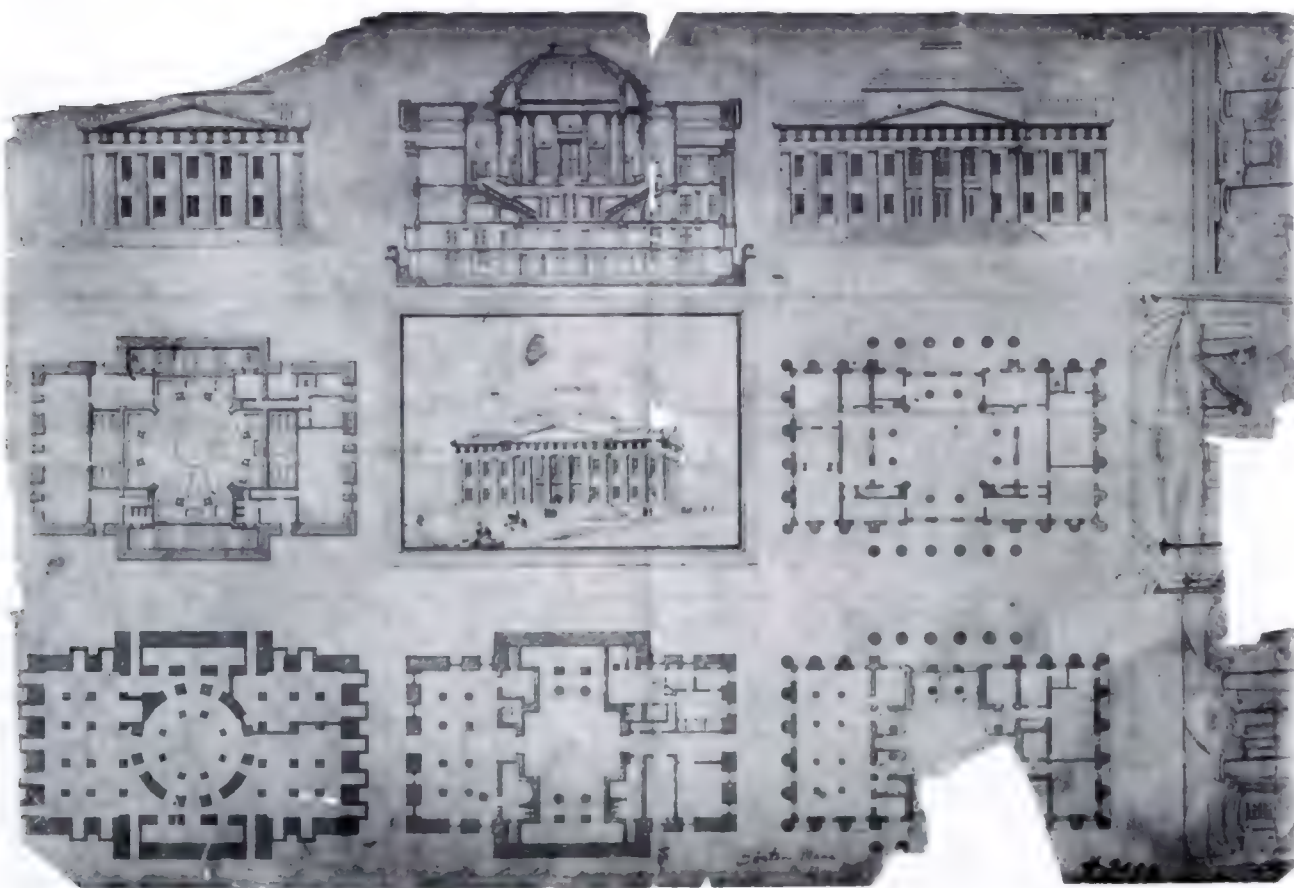


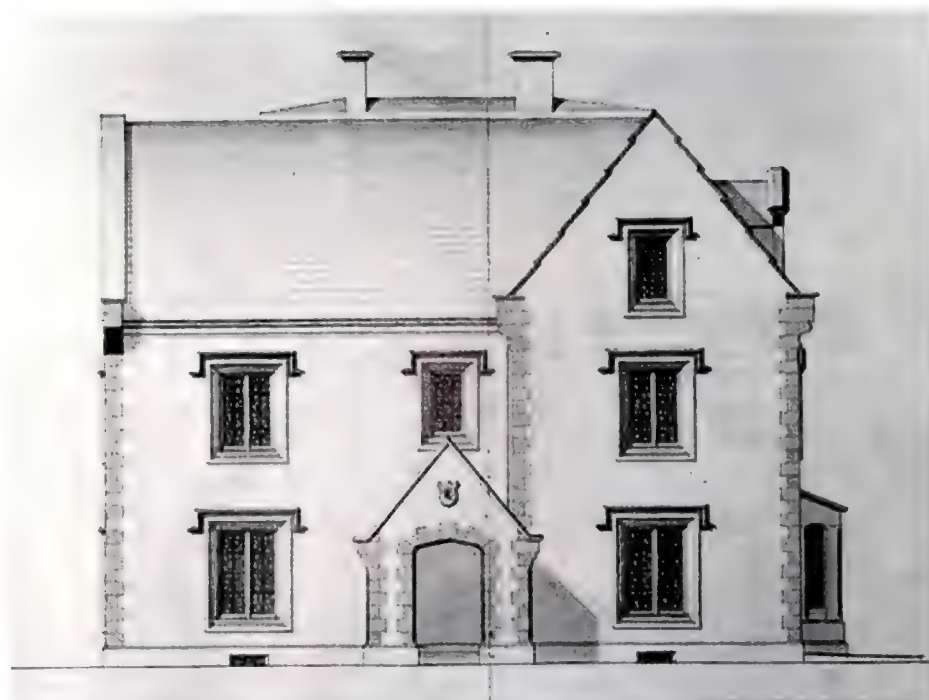
columns for Ammi B. Young's Customs House (1837–1845) were dragged by oxen across the Boston neck and combined with its masonry dome effected the largest-scale engineering feat ever executed in Boston. The structural complexity of Young's design with coffered, stone vaulting, engaged granite columns and other Greek Revival detailing reflected the influence of the British architect Benjamin Latrobe and his successor Robert Mills, then practicing in Washington. It was the first of four monumental United States Federal financial buildings in Boston, each of which has been spectacular.²⁴

But the lack of land in Boston constrained opportunities for civic building and certainly for additional housing. Only a few monumental structures such as the Federal Customs House were completed in the second quarter of the nineteenth century. The arrival in 1833 of the English architect, Richard Upjohn (1802–1878), who worked closely with the engineer/architect George M. Dexter, was of great significance. Dexter was the site architect for several of his buildings in Boston after Upjohn had left to supervise the construction of his famed Trinity Church in New York City (1839–1847). Upjohn's monumental St. Paul's Church in Brookline (1852–1854) was built of Roxbury puddingstone, a richly textured building material, more workable than granite, that began to be used for both civic and ecclesiastical structures in Boston after 1845 and was popular through the end of the century.²⁵

The most important Boston architect in practice in these years, and the first to introduce the new, romantic Gothic and Italianate styles was George M.

Customs House, Boston (Ammi B. Young, 1837–1847): plans, elevations, section and outline, exterior and interior perspectives, Hammatt Billings, delineator. Ammi B. Young, who was supervising architect of the Treasury in Washington, designed one of America's great Greek Revival buildings for the Customs House in Boston, which had monolithic granite columns, dragged in by oxen over the Boston Neck from Quincy.





Amos A. Lawrence House, "Cottage Farm," Brookline. Drawing by George Minot Dexter, 1849. Dexter's elegant drawing of his Amos Lawrence House, "Cottage Farm," is spare in detail, with raised parapets and lintels carved in stone; his plans reveal innovative engineering ideas.

Dexter (1802–1872), an extraordinary yet little-known figure. Unlike his predecessors, Dexter had attended Harvard College and travelled and studied extensively in France and Germany before entering the office of Loammi Baldwin for further engineering training in 1831.²⁶ Despite the high quality of his romantic designs, Dexter considered himself to be primarily an engineer, serving as president of the American Society of Civil Engineers, 1850–1852. Dexter practiced largely in the 1830s and 1840s, producing a notable, crescent shaped residential area of brick row houses on Pemberton Square, which became a center for architects' offices after the Boston fire of 1872.²⁷ Then, for Amos Lawrence, Dexter planned a series of houses in the romantic suburb of Longwood in Brookline in the Gothic style then popular in England and in New York.²⁸ Dexter's elegant drawing of the Amos Lawrence House, "Cottage Farm," is spare in detail, with raised parapets and lintels carved in stone; his plans reveal innovative engineering ideas. Dexter's liberal education at Harvard and European experience was unique and anticipated the next generation in Boston: the artist/architects of the mid-nineteenth century.²⁹

Local architects other than Dexter moved into the profession for the most part on the same traditional educational track as had been the habit of Boston builders for a century-and-a-half. Like Asher Benjamin and Samuel McIntire in Bulfinch's day or Solomon Willard, designer of the Bunker Hill Monument in the early nineteenth century, the mid-century architects of Boston—Alexander Estey and Richard Bond being among the more notable—came up through the ranks.³⁰ In this period two new educational characteristics emerged in the comparatively small group of architects who were then in practice in the city. For the first time artists became closely affiliated with engineers to bring a new importance to the design aspect of the public buildings of this era. The Lawrence Scientific School, an outgrowth of rising interest in Natural History and Science throughout the world, was established at Harvard with a \$50,000 gift

from Abbott Lawrence in 1847. Professorships in Geology and Civil Engineering were founded immediately, and other classes were taught by professors at Harvard College to which the Scientific School was attached while maintaining its own discrete curriculum.³¹ It was here that the only architectural training was available in Boston until 1867, when the M.I.T. School of Architecture was founded.

1.2 ENGINEERS AND ARTISTS: 1845–1867

The Artists

... when I commenced in practice in this city there were but half a dozen architects and several of them bred as engineers. There was but little sympathy between them. Their designs were carefully guarded from each other and their libraries were kept locked.³²
—Edward Clarke Cabot

A new generation of architects, skilled as artists rather than engineers, emerged around 1850 in Boston. Edward Clarke Cabot (1818–1901), founding president of the Boston Society of Architects, who remained in that office through the balance of the century, was the most influential. A watercolor artist of some accomplishment, and, like Charles Bulfinch, a gentleman, Cabot won the second competition for the building of the Boston Athenaeum in 1847. It was his first design, and the assistance of George M. Dexter was required to erect the building.³³

Foremost among Boston mid-century firms was Bryant & Gilman, the largest office in the city. Gridley J. F. Bryant, Jr. (1816–1899), was early exposed to engineering as the son of the engineer of the granite railway in Quincy. An attractive salesman, Bryant's greatest contributions lay in prison design and in introducing modular construction for industrial buildings in the third quarter of the century. He also pioneered the exterior use of iron, which was newly available more widely than ever before. A series of conservative, Italianate warehouses made of quarry-faced granite were erected by Bryant in the dock area of the peninsula, including the Mercantile Wharf (1856–1857). But his most famous structure was the Charles Street Jail of 1851, which became a model of prison design throughout America.³⁴ Bryant & Gilman's pre-fire commercial design was notable for the introduction of the French mansard roof to America.³⁵ The bay and link system in conjunction with the mansard roof was used at the Boston City Hall (1861–1863), Boston City Hospital (1863), and many other civic structures. Here, classical ornament of a Renaissance mode not dissimilar to the Italianate forms of such structures as the Charles Street Jail, began to develop in a more sophisticated and three dimensional fashion. Over the years Bryant collaborated with a series of designer/partners who provided the facades and exterior elevation details of buildings which were erected on a standard modular system behind the facade!

Arthur Gilman, initially enamored of Gothic design and the Italianate style of Charles Barry in England, was Bryant's most important partner.³⁶ Gilman wrote extensively and polemically about architectural style, its meaning and its rules, and on his trip to Paris in 1857 developed the plan which was finally accepted by the city after years of discussion. This plan provided for the ex-

tension of the peninsula by filling the Back Bay along the Mill Dam leading over to the Brookline shore. The Back Bay, which began already in the late 1850s with the laying out of the Public Garden and the buildings along Arlington Street to the west, made possible the enormous epoch of construction which followed the Boston fire of 1872. Gilman's Arlington Street Church (1858) was the first public building in the Back Bay to be built on the same pile-driven foundation system that had been developed for the great docks and waterfront of Boston.³⁷

But while powerful, the works of Bryant & Gilman and their peers were limited by the general conditions of the profession, where Gilman's education and travel were unique. A few foreign architects had come briefly to Boston, but none stayed except George Snell, an Englishman who, like Cabot, was an artist.³⁸

Before 1861, when William Barton Rogers moved from Virginia to Boston, founding the Massachusetts Institute of Technology in 1863, the Lawrence Sci-

Old City Hall, School Street, Boston (Bryant & Gilman, 1861–1863), presentation drawing, for F. A. Stahl Associates, 1969. The conversion of the Old City Hall into elegant offices was a landmark of historic preservation in the 1960s, proving the economic viability of adaptive re-use.



entific School at Harvard had been the only place in Boston where aspiring architects could study. It was to Lawrence Scientific that Boston's leading post-Civil War architects came. William Robert Ware, for example, and his partner-to-be Henry Van Brunt both attended Harvard College. Van Brunt joined George Snell's office (1855–1857) while Ware tutored in New York and attended Lawrence Scientific School. There, the curriculum was broad, but largely theoretical, with studies in the separate disciplines: mathematics, physics and chemistry, not yet related into any sort of cohesive program for the architect.³⁹ Ware & Van Brunt was a firm of particular importance for this epoch, although neither of the partners had studied abroad. Their practice, initiated in 1863, represented an ideal combination of Van Brunt's intellectual and designing talents, and Ware's organizational genius and engineering skills.⁴⁰ Educated in the 1850s, heyday of Bryant & Gilman, both Ware and Van Brunt separately sought instruction at the end of that decade in the atelier of Richard Morris Hunt in the new Studio Building on 10th Street in New York. Here Hunt, America's first architectural graduate from the Ecole des Beaux-Arts in Paris, trained the leaders of America's first professional generation of architects in an academic environment that consisted of the study of antique casts and European buildings, and studio design projects, rather than the customary American system of apprenticeship. It was this plan that Ware would implement at M.I.T.⁴¹

Architectural Program at M.I.T., 1867

The object of the Massachusetts Institute of Technology, in its threefold organization of a Society of Arts, a School and a Museum, is the application of Science to the Useful Arts.⁴²
—William Robert Ware

Returning to Boston, Ware and Van Brunt established a twenty-year practice in 1863 which was central in changing the status of the profession and also the face of the city. While Van Brunt ran the office, his partner was called upon by William Barton Rogers to set up a course of instruction for the Architectural School at M.I.T. Ware's concern about the profession was deep, and the basic premise of M.I.T. appeared sound. Lecturing to the M.I.T. Society of Arts in 1865 Ware outlined a proposed curriculum that reiterated the curricular synthesis of the Institute. That here, at last, was a program to include both science and art was clear, but Ware was undecided at this point on the advantages of either the French or the English system. But he knew that organization of the profession, of methods of writing specifications and development of personnel was essential. Some educational organ must be created:

Meantime the building profession is suffering from another cause, the isolation of its members; the nature of their work bringing architects in contact only with their clients and their mechanics, not with each other. Merchants meet upon change, and lawyers in court; clergymen and physicians have stated means of seeing each other, and keeping up with the times. Architects never meet; and the profession presents the singular spectacle of a score of men, living and working within a stone's throw of each other, and as much allied among themselves as they are separated from the rest of the community by taste and education, but leading each the life of a hermit, and not only cut off from the stimulus of personal intercourse, but though all are engaged in the solution of the same problem, never comparing results, or profiting by each other's experience.⁴³

Ware was sent to Europe for the first time in 1866 on a fact-finding mission

to both England and France. While the program that Ware established at M.I.T. was directly based on that of the Ecole in Paris (and Ware introduced a comparable system of study in 1881 when he was called to Columbia University in New York City), his vision of design was inspired as well by the glory of the High Victorian Gothic style. Brilliant Ruskinian structural polychromy was then moving from ecclesiastical to monumental civic design.⁴⁴ From this vision of England, the impact on both partners by Hunt and the writings of Eugène Emmanuel Viollet-le-Duc (which were first translated into English by Van Brunt in 1876), came the greatest works of the firm: the First Church at Marlborough Street in the Back Bay (1866), Memorial Hall (1866–1878) and Weld Hall (1870) at Harvard, and the spectacular Gothic designs for the Episcopal Theological Seminary on Brattle Street in Cambridge (1866–1873). The English and French design sources that were so successfully combined at Memorial Hall by Ware & Van Brunt soon found expression in Boston's two centers of art education. The French system had educational impact through the design studio of M.I.T. Ware had brought Eugène L'Etang from Paris to run it, and he encouraged young architects to continue their education abroad.⁴⁵ Meanwhile, the English

Memorial Hall, Harvard College, Cambridge (Ware & Van Brunt, 1866–78). The finest building at Harvard combined English and French design precedents, a characteristic of the firm and of Boston architecture of the time.



orientation of both the profession then in practice and its clients persisted in Boston, controlling the picturesque style of buildings erected in the Back Bay despite the grid-like Parisian pattern of its streets.

The dichotomy of architecture and engineering in mid-nineteenth century Boston is best demonstrated in the father and son firm of Jonathan and William Gibbons Preston. Jonathan Preston began his career as a successful contractor, but was joined by his son W. G. Preston upon the latter's return from the Ecole des Beaux-Arts in Paris, where he studied from 1861 to 1863. The notable designs of W. G. Preston for the Boston Museum of Natural History and the Rogers Building of M.I.T. on Boylston Street in the Back Bay, were conceived on a French Beaux-Arts scheme, although the ornamental details of the sculpture were much compromised in execution.⁴⁶ The lack of stone sculptors in Boston before the Civil War resulted in a coarser version of the elaborate French ornament than that intended by the younger Preston. W. G. Preston's iron footbridge in the Boston Public Garden, however, added a delicate French touch to the beginnings of the park system and the entrance to Gilman's Back Bay.⁴⁷

Events occurring around 1867 substantively changed the educational profile of Boston's architects. At the end of the Civil War, the first academic course of study in architecture in America was founded at the Massachusetts Institute of Technology. The leaders of the profession between 1867 and 1889, including the founders of the Boston Society of Architects, were not M.I.T. graduates; but their educational profile was distinct from that of their predecessors in that they were neither artists nor, strictly speaking, engineers. Most of them had either studied or travelled abroad.

Rogers Building, M.I.T., Boylston Street, Boston (William Gibbons Preston, 1862). The original design for the Rogers Building was much modified in execution between its first sketch made in Paris and its completion, because of lack of skilled stone carvers in Boston.

1.3 ESTABLISHING A PROFESSION: 1867–1889

At the Universal Exhibition of 1851, England found herself, by general consent, almost at the bottom of the list, among all the countries of the world, in respect of her art manufactures. Only the United States, among the great nations, stood below her. The first result of this discovery was the establishment of Schools of Art in every large town. At the Paris Exhibition of 1867, England stood among the foremost, and in some branches of manufacture distanced the most artistic nations. It was the Schools of Art and the great collection of works of Industrial Art at the South Kensington Museum that accomplished this result. The United States still held her place at the foot of the column.⁴⁸ —William Robert Ware

During the age of Richardson—the twenty years between 1866 and 1886—a unique confluence of events led Boston to the architectural leadership of the nation. The engineering expertise of this city, which had for decades been held in check by the limited land mass of the peninsula, set the stage for creation of the Back Bay fill, the largest such engineering feat in the world.⁴⁹ Suddenly, after decades of crowding, Boston had new space for residential construction at hand, and the tragedy of the Boston fire of 1872 necessitated rebuilding of the central business district of the city as well. Architectural opportunity thus abounded in Boston, while the economic depression of the mid-1870s limited construction opportunities elsewhere.⁵⁰

A significant rise in the number of practicing architects accompanied this growth; the group tripled in size from twenty architects in 1846 to sixty-six in 1867; in 1889, at the founding of the Boston Architectural Club, the number

The Drawing Studio Interior, Rogers Building, M.I.T. Architectural students at M.I.T. studied design on the French system, making elaborate drawings from casts which were provided in the studios and in the galleries of the nearby Museum of Fine Arts, with which their curriculum was carefully coordinated.



had more than doubled, with 140 listed in the Boston Directory.⁵¹ The educational composition of the profession as it evolved during this interval is significant, for while architects came from elsewhere, including several from England, this was not a foreign-trained constituency. In contrast to the mid-century generation, the leading architects at the end of the century were oriented more toward architecture than engineering. While a new trend was in the making with the return of a generation of architects who trained first at M.I.T. and then in Paris, during the age of Richardson the effects of this trend had not yet been felt. Rather, a duality existed between William Ware's embryonic program at M.I.T. and the industrial arts focus of the South Kensington-based program that centered in the Museum of Fine Arts.

The Boston Society of Architects: 1867

In 1917, the Boston Architectural Club yearbook for the fiftieth anniversary of the founding of the Boston Society of Architects had a composite portrait page of the most eminent members of that generation. The educational history of this group is instructive, for it was they who set the pace for design. As at mid-century, none of the men was foreign. Significantly, only H. H. Richardson and the youngest, Robert S. Peabody, were graduates of the Ecole des Beaux-Arts, confirming that strong influence from France emerged in Boston only in the 1890s with the work of the next generation, represented here by the youthful Robert Peabody. Each of the architects in the commemorative portrait was not only renowned for his own work, but had considerable impact on architectural education in Boston. The eldest, Edward C. Cabot, who presided from 1867 to his retirement in 1897 as president of the Boston Society of Architects, was, like Arthur Gilman, an aristocrat and an artist rather than an engineer. It was under Cabot's leadership that the separation of the architectural profession from that of engineering and from the mechanics became definitive. As a watercolor artist, Cabot was naturally concerned with architectural ornament, an element intrinsic to the buildings of the third quarter of the century, when the Back Bay was built. From the time when Cabot designed the Boston Athenaeum, his influence in Boston was notable for establishing an artistic image for the profession, although he himself had no professional architectural training. In 1867, ten years after the founding of the American Institute of Architects in New York, the Boston Society was founded. Ware and Van Brunt were central figures in this action which occurred in the same year that the educational program at M.I.T. was opened.⁵²

The English-trained John Hubbard Sturgis (1834–1888) had designed the Museum of Fine Arts (1870–1876), an institution explicitly created to emulate the program of the South Kensington Museum and Schools of Science and Art in London where he had studied.⁵³ The whole museum enterprise was thus a symbol of English industrial arts that set the standards of art education for the Commonwealth. It was through the museum school system that young draughtsmen who worked in architectural offices were educated, and the public also was exposed through the museum for the first time to the fine and decorative arts.⁵⁴

Charles A. Cummings, who also appears in the B.A.C. portrait, trained, like William Ware, was an engineer but he was also on the council at the Museum



Boston's leading nineteenth-century architects, *Yearbook, 50th Anniversary of Boston Architectural Club*, Boston, 1917. Left to right: E. C. Cabot, Charles A. Cummings, H. H. Richardson (far right), John Hubbard Sturgis, Robert Swain Peabody. On the club's fiftieth anniversary, a portrait of the city's most prominent architects substantiates an educational bias toward England.



Museum of Fine Arts, Copley Square, Boston (John Hubbard Sturgis, 1870–1876). English terra cotta ornament adorned the brick walls of America's first public art museum, to provide a Gothic jewel box for its decorative arts programs. These introduced the English industrial and fine arts educational system of South Kensington, a style that was reflected in Back Bay buildings. M.I.T. classes were regularly held in the galleries. Architectural draughtsmen were taught through the English-dominated Normal Art School system and the Museum School.



School. The dazzling New Old South Church (1874), which he designed with his partner Willard Sears, demonstrates more accurately than any other Boston building the impact of the English critic John Ruskin, who had written *The Seven Lamps of Architecture* in 1849.⁵⁵ Following Ruskin, Boston architecture of this period inclined toward English foliate, Gothic carving. This style was implemented by a timely influx of skilled stonecarvers who left England during the labor strikes of the late 1860s. They arrived in Boston just at the time of the building boom; their talent left a wealth of English foliate sculpture which would continue to distinguish Boston buildings into the twentieth century.⁵⁶

America's best-known architect of the time was, of course, H. H. Richardson, who was educated in part at the Ecole des Beaux-Arts. It was his skill in planning gained in Paris that distinguished Richardson among his peers, but even he was forced to come to terms with Boston's orientation to the medieval when he returned to the city in 1874. His Romanesque style provided a means to satisfy both the continued ascendancy of Ruskinian taste for the medieval among Boston clients, and his own desire to incorporate the new French formalism of plan and organization into his civic designs and other work.⁵⁷

The youngest man in the portrait, Robert Swain Peabody, travelled to Paris after the Civil War, returning to practice in Boston around 1870. He and Francis Chandler (who first became Cabot's partner and later replaced William Robert Ware as the head of the architectural program at M.I.T.) were leaders of the profession in the following decade.⁵⁸ Their strength in planning and professionalism of execution reflected their European training and travel. Before 1885, however, these credentials were largely grounded in the picturesque sensibilities of the English Arts and Industries tradition.

Museum of Fine Arts: Boston, 1870

The mainstream of Boston architectural education thus flowed dually from English and French sources as the century drew to a close. But another polarity within architecture and architectural education occurred with a growing interest in separating "industrial" and "high" art within the profession. In 1881, a significant demonstration of this split appeared with the erection of a pair of buildings: the Boston Art Club, built for Boston artists adjacent to the Venetian New Old South Church from designs by the Shingle style architect, William Ralph Emerson; and Mechanics Hall by W. G. Preston, who had designed M.I.T.'s building in 1863.⁵⁹

Mechanics Hall, Huntington Avenue, Boston (William Gibbons Preston, 1881). Jonathan Preston, father and partner of the architect, was a successful contractor with long established membership in the Mechanics Association. His son designed its building and also the terra cotta ornament provided by the Boston Terra Cotta Company.

Boston Art Club, Dartmouth Street, Boston (William Ralph Emerson, 1881). Many exhibitions of the Boston Architectural Club and other joint events were held in the Art Club galleries before larger quarters on Somerset Street were acquired. Space was needed for exhibition of architectural drawings. The Queen Anne Revival style of the club, and most of the Back Bay, reflected the influence of current British architecture. To the rear is Cummings & Sears's New Old South Church.





First Parish Church, Weston (Peabody & Stearns, 1885–1889). The bouldered walls of this church reflect the impact of H. H. Richardson's work in North Easton. The new focus on ecclesiastical architecture, which rose to a peak in Boston in the last decade of the nineteenth century, culminated with the work of Ralph Adams Cram and his partner Bertram Goodhue. Peabody travelled extensively in England, sketching churches. His drawings are in the collection of the B.A.C. Memorial Library.

Preston, whose father and partner Jonathan Preston was a contractor, designed the enormous Hall, running westward from Art Square (now Copley Square) on Huntington Avenue. It was modelled on nineteenth-century exhibition buildings such as the Crystal Palace in London and was designed to accommodate the programs of the Mechanics Association, a segment of the building trade whose importance was explicitly acknowledged by William Ware in his proposal for the M.I.T. program in 1865.⁶⁰ Both the Boston Art Club and Mechanics Hall made use of terra cotta, a material popular in this period for architectural sculpture. Significantly, while Preston's ornament was industrially mass-produced for a round-arched, conservative design, the Boston Art Club's terra cotta was hand-sculpted to create a Queen Anne Revival, picturesque elevation on the corner of Dartmouth and Newbury Street. The resulting building is close in style to the fashionable buildings in London and the Back Bay.⁶¹

It would be misleading to dwell further on the schisms within architectural style and the architectural profession in the age of Richardson, however; for what in fact distinguishes Boston architecture is a surprisingly harmonious mix of disparate inclinations. Nowhere was this more evident than within the curriculum at M.I.T., which, as the only professional architectural school of the time, managed to blend the new French atelier system of instruction in the high arts with the English tradition of industrial arts, which aligned with M.I.T.'s status as a technical school. The return of the next generation of architects from the Beaux-Arts in Paris accelerated more fully the implementation of the atelier system of teaching at M.I.T., yet the Institute remained in close physical and spiritual contact with the Museum School, where the program took its cues from the South Kensington Schools of Science and Art in London. In fact, Walter Smith, an Englishman who served as director of art education for Massachusetts and professor at the Boston Normal School made a case in 1873 for the English version of art education with a quote from Professor Ware of M.I.T.:

Setting aside then, for the present, any question of Fine Art, it will not be denied, that, regarded merely as one of the useful arts, the position of the art of building in this

community renders it peculiarly open to the good offices of the Institute. Here, if anywhere, is there need of having the simplest, cheapest, and most enduring ways of doing things found out, and when proved made public, and of having workmen trained to skill in those methods.⁶²

Thus, in the age of Richardson, while New York embraced the Beaux-Arts new classicism, and even Boston moved gradually toward the French-dominated system of architectural education, a firm Bostonian orientation toward English industrial arts and British style persisted. This confluence of style would mark the work of the coming generation; Robert Peabody, with a Beaux-Arts education, yet devoted to picturesque siting and elevation, is perhaps the best example. His original sketch for the First Parish Church in Weston was made three years after Peabody returned to England for a sketching trip of English churches.⁶³ The picturesque perspective is a compositional element that persists over forty-four years in the work of Peabody, independent of the style of any given design. The Weston church was eventually surrounded by an Olmsted landscape, demonstrating the full absorption of that picturesque tradition which characterizes Peabody's great Shingle style houses, such as "Kraggsyde," that were published on both sides of the Atlantic. "We rendered the French projects," he wrote of his days at the Ecole, "but the thought of England and the picturesque was ever present within us."⁶⁴

2 EDUCATION AND LANDSCAPE ARCHITECTURE

Cynthia Zaitzevsky

Cynthia Zaitzevsky, Ph.D., a graduate of Harvard's Department of Fine Arts, won the Winship Award from the Boston Globe for her book Frederick Law Olmsted and the Boston Park System in 1983. She has taught at Tufts, Boston University and in the Radcliffe Seminars at Harvard. Cynthia Zaitzevsky is the first recipient of the Buell Senior Fellowship at Columbia University in 1988–1989. She is past-president of the New England Chapter of the Society of Architectural Historians.

This essay is dedicated to the memory of Albert Fein (1930–1989), pioneering historian and unparalleled teacher of American landscape architecture.

INTRODUCTION

In 1900, Harvard University initiated a degree-granting graduate program in landscape architecture, the first such university curriculum for aspiring professionals in the country. President Charles W. Eliot established the program and appointed Frederick Law Olmsted, Jr. to head it.¹

Well before the turn of the century, many individuals from a wide variety of backgrounds had designed landscapes of great distinction. Frederick Law Olmsted, Sr., who moved from New York to Brookline in 1883, was the first to refer to himself as a landscape architect rather than the more customary nineteenth-century term “landscape gardener.” In his Brookline office, he also began an apprenticeship program of education, supervised reading, travel and practical experience for young men interested in the profession. For at least fifty years before that date, however, practitioners of other types from the Boston area had been active in landscape design and planning.

2.1 LANDSCAPE GARDENERS, ENGINEERS AND ARCHITECTS

From the colonial period into the early nineteenth century, the great mansions of the Boston area, such as those of Isaac Royall in Medford and Christopher Gore in Waltham, were ornamented by carefully laid out grounds, sometimes with elaborate gardens and garden structures. In the case of both Royall House and Gore Place, correspondence and family records indicate that, as at Mount Vernon and Monticello in Virginia, the owners were the landscape designers. However, in the 1790s, there are at least two documented instances where the owners of country estates near Boston imported landscape professionals. At “Pleasant Hill” in Charlestown, Joseph Barrell brought in an Englishman, G. Stevenson, to lay out the grounds of his Bulfinch-designed country house. Sim-

ilarly, at "The Vale" in Waltham, Theodore Lyman imported another Englishman, William Bell, to landscape the extensive grounds of his McIntire-designed house.²

In the eighteenth century, landscapes, like buildings, were designed either by "gentlemen amateurs" or "builder craftsmen" (in this case, gardeners). The chief difference is that the bifurcation of landscape design lasted much longer: into the first half of the nineteenth century, then running parallel with the development of professional landscape architecture in the second half of the century, and persisting even into the twentieth century. Another difference is that sometimes the gentleman amateur and his gardener would work in tandem. The term "amateur" should not be construed as derogatory. It means quite literally that such individuals did not earn their livings by designing landscapes. Frequently, their work, like that of Jefferson at Monticello, was more distinguished than that of some of the professionals who followed. A particularly important local gentleman amateur was General Henry A. S. Dearborn, first president of the Massachusetts Horticultural Society and principal designer of Mount Auburn Cemetery in Cambridge and Watertown, laid out in 1831.³

Italian Garden seen from Lake Waban, Hollis H. Hunnewell Estate, Wellesley (Hollis H. Hunnewell, designer, begun 1850). The Italian Topiary Garden, seen here from Lake Waban, was the most famous section of the estate. Equally important were Hunnewell's pinetum and his plantations of rhododendrons and azaleas.



Of mid-nineteenth century, owner-designed residential grounds in the Boston area, the most important estate is unquestionably that of H. H. Hunnewell in Wellesley. In 1843, after a career in banking, he settled in a house owned by his wife's family in what was then still part of Needham near the Natick border, and "became interested in country life." In 1850, when his "ideas of country life" were "enlarged," he built a house designed by Arthur Gilman, sited so as to have a view of Lake Waban, and purchased additional land on the shores of the lake for a topiary garden, which he designed in imitation of that at Elvaston Castle in Derbyshire, England. Although the Italian topiary garden was the most famous element in Hunnewell's grounds, other aspects of the property were perhaps more important historically. His early plantations of azaleas and rhododendrons came at a time when these were still experimental, but most impressive was the pinetum—the Hunnewell collection of conifers that preceded that of the Arnold Arboretum by almost two decades. Due to its publication in A. J. Downing's widely read *Treatise on the Theory and Practice of Landscape Gardening*, the Hunnewell Place became one of the best known private gardens of its era in the country. As a landscape designer, Hunnewell seems to have been self-taught, but his longtime gardener, F. L. Harris, may also have played an important role in realizing Hunnewell's aims.⁴

Surprisingly, it was Charles Sprague Sargent, director of the Arnold Arboretum, who was the last in the great tradition of gentlemen landscape gardeners, at least in this region. Sargent, professional botanist and amateur landscape designer, should probably be considered co-author with Olmsted of the Arboretum plan, but it was the laying out of his own grounds, which he did unaided, that was his greatest design achievement. Soon after inheriting his Brookline property "Holm Lea" in 1884, Sargent began a virtual transformation of the estate that caused it to become the horticultural showplace of greater Boston. However, Sargent's improvements went beyond the strictly horticultural to include the placement of drives, ponds, and the subtle manipulation of spaces and vistas. Sargent's elder son, Andrew Robeson Sargent, became a landscape architect, undoubtedly having learned many fundamental design and horticultural skills from his father. After graduating from Harvard College in 1900, he entered the architectural office of his brother-in-law Guy Lowell, where he remained as a designer of gardens for the firm until his death in 1918.⁵

Charles Sprague Sargent's role as educator had a less traditional side. At the turn of the century, there was no avenue for women to study landscape architecture, and serious study of botany and horticulture was also difficult for them. Sargent had the knack of identifying intelligent women with aptitudes for these fields. It seems clear, for example, that he tutored Mariana G. Van Rensselaer in plant identification, realizing that this would help her as a critic of landscape architecture. One of Sargent's earliest and certainly his most famous female student was Beatrix Jones (later Mrs. Max Farrand). Born in New York of a garden-loving family and a niece of Edith Wharton, Farrand met Mr. and Mrs. Sargent in 1892. Sargent suggested that she become a landscape gardener (like Sargent, both Farrand and Mrs. Van Rensselaer preferred that term to landscape architect), and she went to live at "Holm Lea" to study botany, surveying and design either at the Arboretum or personally with Sargent. At Sargent's encouragement, she travelled widely in Europe and set up her

own office in New York in 1896. Farrand's most important works include the Robert Woods Bliss estate "Dumbarton Oaks" in Washington, D.C., now part of Harvard University, the Abby Aldrich Rockefeller estate in Seal Harbor, Maine, and the landscaping of several campuses, including Yale University.⁶

During the nineteenth century, civil engineers also played a prominent part in landscape design, particularly in large-scale public or semi-public projects. Although Henry A. S. Dearborn (with some assistance from Jacob Bigelow) was the principal designer of Mount Auburn Cemetery, the possibility that a young civil engineer, Alexander Wadsworth, may have contributed something to the design cannot be entirely ruled out. He surveyed the land and drew the original plan for the cemetery. Certainly, Wadsworth later designed cemeteries in Malden and Salem, as well as Pemberton Square in Boston, and numerous subdivisions in the Boston area, including Longwood and Cottage Farm in Brookline for the Sears and Lawrence families.⁷

Another civil engineer who practiced landscape design with great skill was Ernest W. Bowditch. Among Bowditch's projects was an unrealized plan for parks in metropolitan Boston, designs for the Cleveland park system, the plan of the resort community of Tuxedo Park in New York, Walnut Hill Cemetery in Brookline and many subdivisions in and around Boston and Cleveland. He also laid out many private estates, such as those of William Ellery Channing Eustis in Milton, Morris K. Jesup in Lenox and the original "Breakers" for Pierre Lorillard in Newport. Another engineering firm of considerable importance locally was Aspinwall & Lincoln of Brookline. Recent research also indicates that a civil engineer, Joseph H. Curtis, laid out the grounds of McLean Hospital in Belmont after Olmsted had selected the site.⁸

Yet another class of individuals who practiced landscape design in the nineteenth century were professional landscape gardeners or horticulturists, many of them from families who owned large nurseries. A. J. Downing had such a background. Frequently, the landscape gardener would team up with a civil engineer whose skills were complementary to his own. In 1868, Francis L. Lee and Charles Follen listed themselves in the Boston City Directory as "landscape architects." This was the first Boston firm to describe itself in this manner at a time when Olmsted and Calvert Vaux had been using the term for only a decade, and it was still not readily accepted. Lee was a landscape gardener and Follen a civil engineer. Partnerships of a similar makeup had been listed for many years but under the heading of landscape gardeners.⁹ The horticultural and nursery tradition continued to produce landscape architects into the twentieth century. Two of the most important were Warren H. Manning and James Frederick Dawson, both products of the Olmsted firm who will be discussed in the next section.

Although relatively few architects designed landscapes independently of building commissions, there were exceptions. In 1859, George F. Meacham won a competition for the redesign of the Boston Public Garden. Meacham continued to advertise himself as a landscape gardener as well as an architect, although he is known to have done only one other such design; a small park in Newton. Earlier, Arthur Gilman had been responsible for the street plan of the Back Bay, with its landscaped central mall, although the plan for the South End, which features small residential parks in the English tradition, is generally

attributed to engineers Chesborough and Parrott. Landscape projects with a strong urban design component were naturally of great interest to architects, and a competition for the improvement of Copley Square held in 1892 by the Boston Society of Architects produced a large number of interesting proposals including the winning scheme by C. Howard Walker and a second place entry by Arthur Rotch (neither executed).¹⁰

Even architects with no interest in pursuing landscape design as a sideline were, of course, vitally concerned about the siting and immediate environment of their buildings, and some did detailed site and land planning themselves. In the early twentieth century, some architects, especially those who had extensive practices in residential design, offered a complete estate package: house, outbuildings, and grounds. Besides Guy Lowell, working in association with Robeson Sargent, these included Philadelphia architect Wilson Eyre and New York architects Charles A. Platt, Carrère & Hastings, Delano & Aldrich, and John Russell Pope.¹¹

2.2 THE OLMSTED FIRM IN BROOKLINE

In 1857, the partnership of Frederick Law Olmsted and Calvert Vaux was formed for the Central Park competition in New York. This partnership was dissolved in 1872 "for reasons of mutual convenience." Olmsted did not im-

Sheep Rest at the Bridge, Franklin Park, Boston (F. L. and J. C. Olmsted, landscape architects, 1885; Shepley, Rutan & Coolidge, architects of Scarborough Bridge, 1891). The Franklin Park Meadow, according to the revised plan of 1891, included Scarborough Pond and two bridges by Shepley, Rutan & Coolidge, and was planned by Olmsted as Boston's rural "country park." Intended as a complete contrast to the city, the meadow originally had its own flock of sheep, which not only enhanced its pastoral atmosphere but made hand-mowing of the grass unnecessary.



mediately take another partner, although in 1874 he made a formal working arrangement with Jacob Weidenmann, a Swiss architect who turned to landscape design after emigrating to the United States. Until he moved permanently to Brookline in 1883, Olmsted practiced out of a converted dining room in his row house at 209 West 46th Street. Beginning in 1878, the year his work on the Boston park system began, he frequently spent summers in rented quarters or friends' houses in Cambridge or Brookline, so that he could be closer to the Boston park sites.¹²

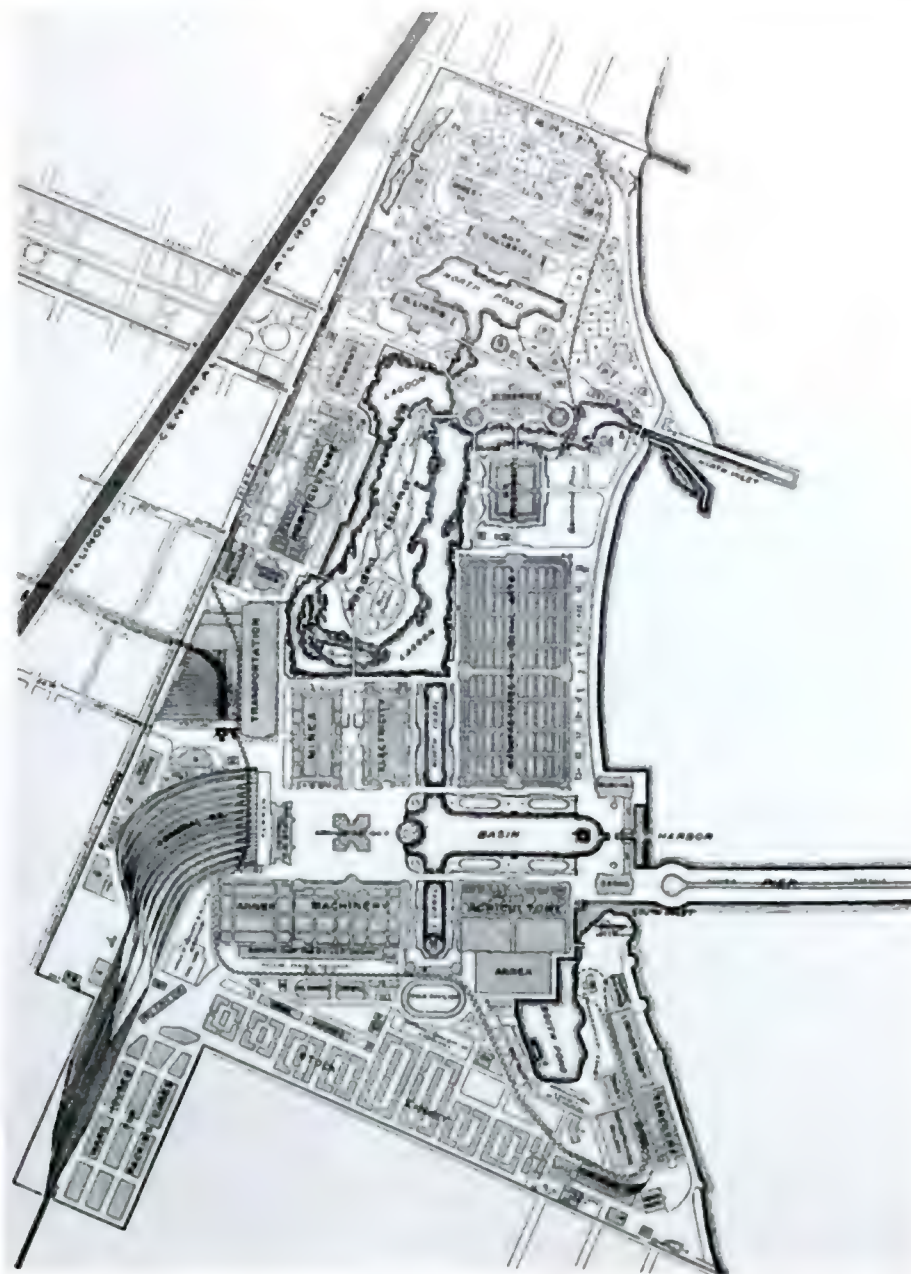
Olmsted had no systematic education in landscape architecture. As a youth, however, he apprenticed informally to a civil engineer and also practiced scientific farming in Connecticut and on Staten Island. Further, his first two associates, Vaux and Weidenmann, were architects with the broad experience in design that Olmsted lacked, and Vaux had the added advantage of an earlier partnership with A. J. Downing. After his association with Weidenmann ended, it must have become apparent to Olmsted that, if he were to have adequate partners and assistants, he would have to educate them himself. Fortunately, a promising candidate was close at hand. Olmsted's stepson, John Charles Olmsted, graduated from the Sheffield Scientific School of Yale University in 1875. Although he had wanted to become an architect, Olmsted persuaded him to come into the firm, where he was given an interest in 1878 and became a full partner in 1885. From his stepfather's retirement in 1895 until his own death in 1920, John Charles Olmsted was senior partner. He was the one chiefly responsible for the firm's long span of continuity from the small New York office to the bustling establishment that was Olmsted Brothers in the early twentieth century. Although he lacked his father's gift for persuasion, and the natural *bonhomie* of his half-brother, Frederick Law Olmsted, Jr., John was one of the most gifted designers to emerge from the firm. He should be considered co-designer with Olmsted on the plans of the Back Bay Fens and Franklin Park as well as "Biltmore," the George W. Vanderbilt estate in Asheville, North Carolina, and other important projects of the 1880s and 1890s.¹³

Shortly after his move to 99 Warren Street in Brookline, Frederick Law Olmsted took on his first official apprentice. (We know little about John's earlier three-year training period, but it was probably fairly informal.) This was Charles Eliot, son of President Eliot of Harvard, who was introduced to Olmsted in the spring of 1883 by his uncle, the architect Robert S. Peabody. Eliot graduated from Harvard College and then spent several months at the Bussey Institution, Harvard's School of Agriculture, before deciding that he wanted to become a landscape architect. After starting with Olmsted, one of his frequent duties was to accompany the older man on field visits to various parts of New England. By the end of the year, Eliot was drafting plans for the Boston park system and other projects and following a course of reading assigned by Olmsted. After two years in the Olmsted office, Eliot set out on a two-year tour of Europe, visiting parks and gardens recommended by his mentor.¹⁴

At the end of 1884, Olmsted accepted his second apprentice, Henry Sargent Codman, who came well recommended by two uncles: Charles Sprague Sargent and the architect John H. Sturgis. Codman's program was similar to Eliot's. When Eliot left for Europe, he was in the midst of a series of studies for the distribution of trees in the Arnold Arboretum. Although Codman had been

in the Olmsted office for only a few months, he picked up where Eliot left off and ultimately arrived at the final Arboretum tree plan. Codman left for his tour of Europe in 1887. For several months, he was accompanied by Sargent, who took him to parks and gardens in England, Germany, France and Italy. Codman then spent more than a year in the office of Olmsted's friend Edouard André, the landscape architect who completed the parks of Second Empire Paris after the death of Jean Alphand. When Codman returned in 1889, he accepted Olmsted's offer of a position in the firm. His most important contribution to the firm, however, was as Olmsted's second-in-command for the World's Columbian Exposition. In January 1893, while in Chicago, Codman suddenly developed appendicitis and died at the age of 29.¹⁵

Olmsted had made a similar offer of partnership to Eliot when he came back



Map of the Buildings and Grounds of the World's Columbian Exposition, Chicago, Ill. (F. L. and J. C. Olmsted, landscape architects, with Henry Sargent Codman, 1893). For the exposition site, Olmsted chose Jackson Park, designed with Vaux in the early 1870s but never completely constructed. The new plan for the buildings and grounds was predominantly in the formal, axial City Beautiful style but included the picturesque Wooded Isle. After the exposition, the firm prepared a third design, which converted the site back into a park.

from his European travels, but Eliot preferred to set up an office of his own in Boston. Among the projects that Eliot carried out in his solo practice are Longfellow Park in Cambridge, White Park in Concord, New Hampshire, the subdivision of "Shady Hill," the Charles Eliot Norton estate in Cambridge, the grounds of Peabody's Unitarian Church in Weston, Massachusetts (which included a replanning of the town center), the improvement of the Charles River banks on the Cambridge side, and several residential projects. During his boyhood summers on Mount Desert Island, Maine, Eliot had developed a love of wild scenery in its natural state and a desire to see important spots preserved. In 1890, he formed the Trustees of Public Reservations (now the Trustees of Reservations), a privately funded organization, to set aside "surviving fragments of the primitive wilderness of New England."¹⁶

Map of the Metropolitan District of Boston, showing the existing public reservations and the new open spaces. Proposal to the Metropolitan Parks Commission (Charles Eliot, landscape architect, 1893). The system of woodland, riverside and ocean reservations proposed to the Metropolitan Park Commission by Charles Eliot and Sylvester Baxter was carried out by Eliot after he joined the Olmsted firm and was extended by Olmsted Brothers.



Sylvester Baxter, a Malden journalist and one of Olmsted's staunchest supporters, had for many years been campaigning to save the Middlesex Fells north of Boston. In a book called *Greater Boston*, published in 1891, Baxter recommended the public acquisition of a large system of metropolitan parks. Shortly after the book appeared, Baxter "met his friend Charles Eliot, the young landscape architect. Eliot, enthusiastic about the suggested metropolitan parks, proposed that they work together for realizing it." In 1892, Governor Billy Russell, a boyhood friend of Eliot's, signed a bill authorizing a temporary Metropolitan Park Commission, which was established with Baxter as secretary and Eliot as landscape architect. After Eliot and Baxter spent a year visiting potential sites, the Metropolitan Park Commission published its first report, a major document that included substantial contributions by each. This came out in January 1893, just as news was received of Codman's death. Olmsted again offered Eliot a partnership, and this time he accepted. Along with ongoing planning for the Cambridge Park Commission on the Charles River, Eliot's plan for the Metropolitan Park System was the major project he brought into the firm of Olmsted, Olmsted & Eliot. After the establishment of the permanent commission in 1893, the firm continued to do work for the Metropolitan Park Commission, but Eliot lived to see it through only until 1897, when he died of pneumonia.¹⁷

Olmsted's function as principal of a firm and guide to young professionals is intimately connected with H. H. Richardson's parallel role in his firm. The two had been friends since the 1860s, when both lived on Staten Island and commuted to New York. In 1883, Olmsted purchased a house on Warren Street in Brookline near Richardson's Cottage Street home/office. He followed Richardson's example by setting up his office in the same building and, eventually, erecting a large office wing. In Paris, Richardson had studied in the atelier of Jules André. Richardson offered something of the same experience to his young staff by providing a large library and a congenial, extended family atmosphere. Most of Richardson's staff had already graduated from the architectural program at M.I.T., so the Cottage Street office became a kind of finishing school.¹⁸

By contrast, Olmsted's apprentices (who were not paid employees) had received liberal arts degrees, which usually had no special applicability to landscape architecture. In the late 1890s, after the appearance of several articles on the profession by Mrs. Van Rensselaer, Olmsted found himself besieged by letters from aspiring landscape architects. He advised suitable candidates to complete a college program, then take specialized courses in architecture, engineering and drafting at M.I.T. or Harvard, and then further courses in botany and horticulture at the Bussey Institution and Arnold Arboretum. By the time he retired in 1895, Olmsted was running what was virtually a private, post-graduate program in landscape architecture in his office.¹⁹

Among the landscape architects who either served apprenticeships or spent their early formative years in the Olmsted office and then established major practices on their own were Warren H. Manning, an expert on horticulture, who became the prime mover behind the founding of the American Society of Landscape Architects, and Arthur A. Shurcliff (earlier Shurtleff), who later designed the Storrow embankment on the Boston side of the Charles River. Two especially gifted practitioners who spent most of their careers with the Olmsted firm were Percival Gallagher and James Frederick Dawson, both noted for res-

Charles River Basin (Storrow Embankment), Boston (Arthur A. Shurcliff, landscape architect, 1930s). With his son and partner Sidney Shurcliff, Shurcliff redesigned the Embankment in the 1950s when Storrow Drive was put in. Shurcliff also designed the Franklin Park Zoo grounds, redesigned much of the southern basin of Olmsted's Back Bay Fens near the Museum of Fine Arts, and was also in charge of the landscape restoration of Colonial Williamsburg.



idential, campus and subdivision design. Pre-eminent among the twentieth-century successors in the Olmsted firm was of course Frederick Law Olmsted, Jr., who joined the firm in 1895 and was especially known for his role in collaborative public planning, such as the McMillan Commission Plan for Washington, D.C. of 1901.²⁰

2.3 THE HARVARD PROGRAM AND BEYOND

Although the Harvard program was the first curriculum in landscape architecture to be established within a university, it came into being at exactly the same time as a more short-lived course of studies in landscape architecture at M.I.T. This was a third-year option for students in architecture and was begun in the spring of 1900 by Guy Lowell, an 1894 graduate of M.I.T. During its brief history—it was discontinued as an undergraduate course in 1904 and as a graduate course in 1909—the M.I.T. option produced a number of distinguished graduates, including Marian Coffin, who like Beatrix Farrand was an important early woman practitioner.²¹

As noted earlier, courses in horticulture had been offered for many years at Harvard's Bussey Institution. In spite of the fact that his son had had the advantages of both the Bussey and an apprenticeship with Olmsted, President Eliot had long been concerned about the deficiencies of this kind of ad hoc preparation for what was becoming an important profession. In 1899, Nelson Robinson of New York came to Eliot to offer a generous gift in memory of his son, who had died while still an undergraduate at Harvard. The younger Robinson had wanted to become an architect, so Eliot suggested that the gift be used to endow the architectural program at Harvard. When Robinson learned that Eliot had also recently lost his son, he in turn suggested that the gift be used as well for a new program in landscape architecture. When Harvard's program was initiated, it was as a memorial to Charles Eliot, with an endowed professorship and, a few years later, a travelling fellowship in his name.²²

At the outset there seemed to be some uncertainty as to which part of Harvard was the most appropriate home for the new curriculum. The program began under the auspices of the Lawrence Scientific School, with Frederick Law Olmsted, Jr. as instructor (later professor) and Arthur Shurcliff as assistant in landscape architecture. Benjamin Marston Watson of the Bussey offered courses in horticulture. Members of other Harvard faculties taught courses in botany, geology, civil engineering, etc. Also affiliated with the program were H. Langford Warren, Professor of Architecture, and Charles H. Moore, Professor of Art. For several years, a four-year undergraduate course was offered toward the degree of Bachelor of Science, but, from the beginning, it was strongly recommended that candidates already have a B.A. in liberal arts, whereupon they could complete the architecture course in two or three years. In 1906, the Graduate School of Applied Science was founded, and in 1908 landscape architecture became exclusively a graduate program within that School.²³

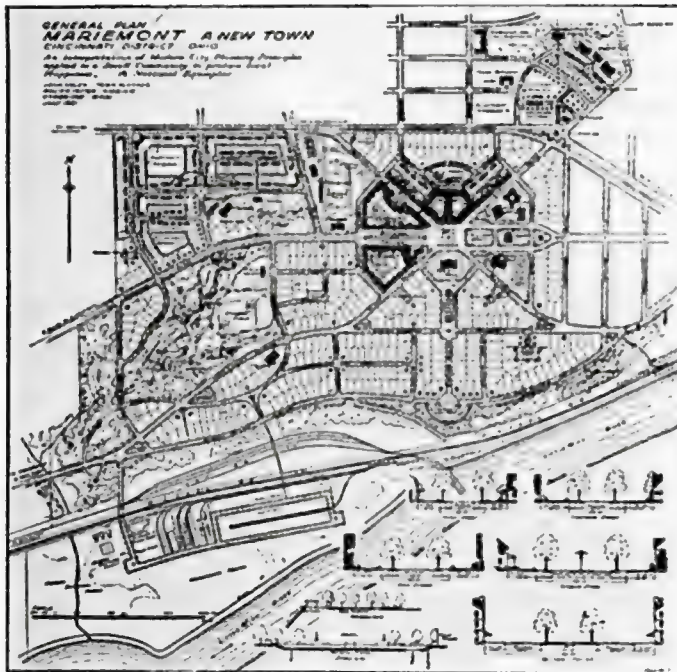
Frederick Law Olmsted, Jr. headed the program through 1915 and Arthur Shurcliff left the faculty in 1906. After those years, one of the most important and consistent faculty members to appear in the Harvard program was James

Sturgis Pray. Pray graduated from Harvard College in 1898, where, in his last two years, he studied at the Bussey and the Lawrence School. From 1898 to 1903, he was a member of the Olmsted firm and then briefly joined forces with Percival Gallagher. He became a member of the Harvard faculty in 1902, was appointed chairman of the Department in 1908 (a position he held for twenty years), and, after Olmsted's resignation, became Charles Eliot Professor of Landscape Architecture, a position he retained until his death in 1929. Pray devoted most of his career to education and developed many new methods of instruction that were later accepted as standard. In 1909, he offered the first course in city planning in the country, and, in 1923, Harvard granted the degree of Master of Landscape Architecture in City Planning within what was then the School of Landscape Architecture.²⁴

Henry Vincent Hubbard occupies a unique position in the history of Harvard's program in landscape architecture: not only was he a member of its faculty for thirty-five years, but he was also its very first graduate in 1901. In 1907, after six years with Olmsted Brothers, he entered a partnership with H. P. White, which Pray joined shortly afterward. In the same year, he also began teaching landscape architecture at Harvard. Four years later (1910), he was one of the founders of the magazine *Landscape Architecture*, the first professional journal in the field, which Hubbard edited until his death in 1947. During World War I, he was active as a planner and consultant for both federal housing programs: the Emergency Fleet Corporation and the United States Housing Corporation. In 1920, he returned to Olmsted Brothers as a partner. Hubbard was also very important in the development of city and regional planning as a profession related to but distinct from landscape architecture. Pray, as we have seen, offered the first course in this area but still within the Department of Landscape Architecture. In 1929, a conference was held at Columbia University to determine whether city planning should be a formal and separate course of instruction, and the consensus was that it should. Harvard submitted a proposal, in competition with other universities, to the Rockefeller Foundation to found a separate School of City and Regional Planning, which was accepted and funded for seven years. In the same year, Hubbard was named Charles Dyer Norton Professor in Regional Planning, which he remained until his retirement in 1941.²⁵

Since M.I.T.'s option in landscape architecture (which admitted women from the first) ended in 1908, and since Harvard did not open any of its design programs to women until 1942, there was a considerable vacuum in instruction for the many women interested in the profession. Two schools were formed to fill the gap. In 1901, Judith Eleanor Motley Low founded the Lowthorpe School of Landscaping, Gardening and Horticulture for Women. Mrs. Low, who had studied horticulture at Swanley College in England, converted her home in Groton, Massachusetts into a school that consistently emphasized the horticultural side of landscape design. Among the early trustees and patrons of Lowthorpe were Charles Sprague Sargent, President Eliot of Harvard, and President Alice Freeman Palmer of Wellesley. In 1945, the Lowthorpe School merged with Rhode Island School of Design.²⁶

More significant in its relation to Harvard was the Cambridge School of Architecture and Landscape Architecture. From its almost accidental beginnings in 1915, this school was always marked by an atmosphere of informality and



Mariemont, near Cincinnati, Ohio (John Nolen, town planner, 1923). One of John Nolen's most outstanding contributions was in the planning of new industrial towns, and of these the best and most complete example is Mariemont near Cincinnati, a model garden community established by Mrs. Thomas Emory in 1923 as a memorial to her husband. Mariemont was a collaborative effort, involving twenty-six architectural firms, three of them from Boston.

excitement and by a close association between prospective architects and landscape architects that did not then exist at Harvard, where both were still separate schools. The Cambridge School began when Katherine Brooks petitioned Harvard's School of Landscape Architecture to take basic courses of a technical nature before entering Lowthorpe. Her request was turned down, but James Sturgis Pray suggested private study with Henry Frost, a member of the architecture faculty. For a few months, Frost taught Miss Brooks the fundamentals of both disciplines at her home, but, when others applied a few months later, the instruction was moved to the Harvard Square offices of Frost and Bremer W. Pond, a landscape architect also on the Harvard faculty. As Frost put it "... tutoring the Tuscan orders on a teetering card table in a lady's parlor produced a certain sense of unreality and indifferent draughting." Although the School could offer only certificates and not degrees, it grew rapidly and, in 1928, moved to the Dalby House at 53 Church Street. In the 1930s, it became a graduate school of Smith College and, for the first time awarded Master of Architecture and Master of Landscape Architecture degrees, many of them granted retroactively to women who had completed the course years earlier and were in practice. The affiliation proved administratively difficult and was discontinued in 1938. After producing many distinguished graduates in both architecture and landscape architecture, the Cambridge School closed in 1942. Lowthorpe and the Cambridge School were both institutions of national importance: for almost forty years, they educated nearly every significant woman landscape architect in the country.²⁷

Among the early graduates of the Harvard program were two whose remarkable careers are currently the subject of intense interest among historians and practitioners. Although both were figures of national significance, their interests were widely divergent. Like Olmsted, John Nolen did not become a landscape architect until his mid-thirties, but, after his graduation from Harvard in 1905, he practiced and wrote prodigiously in his chosen specialties of city

planning and the design of industrial communities. Of the latter, his best known plan is for the garden community of Mariemont near Cincinnati. Fletcher Steele, whose first employer and mentor was Warren Manning, specialized almost entirely in residential design. A landscape architect of great subtlety and sophistication, Steele combined formal classicism with the emerging modernism of the period. As a result many of his landscapes resemble Post-Modern designs of today. Among his many elegant gardens is "Naumkeag" in Stockbridge, Massachusetts, begun in 1926 for Miss Mable Choate. Both Nolen and Steele were trustees of the Cambridge School and both were on the Harvard



The Afternoon Garden, "Naumkeag", Stockbridge (Fletcher Steele, landscape architect, 1926–1955). Especially significant among Steele's many residential designs is "Naumkeag" in Stockbridge, a landscape planned in several stages over three decades for Miss Mabel Choate. First to be designed, in 1926, was the Afternoon Garden, adjacent to the library, a remarkable synthesis of the California "outdoor room" with Renaissance and contemporary French influence.

faculty for brief periods. Particularly in the case of Steele, whose staff included Stanley White, later the teacher of Hideo Sasaki at the University of Illinois, their role as educators extended into their office practices.²⁸

In 1929, the Boston Chapter of the American Society of Landscape Architects, founded in 1913 as the first A.S.L.A. Chapter in the country, issued a handsome *Year Book* illustrating the work of its members. The list of fellows and members included virtually all of the landscape architects mentioned here who were still alive in 1929 and practicing in greater Boston. Of the forty, eleven were then with Olmsted Brothers, and at least six others had spent their formative years with the firm. Of the three women, one was an early graduate of M.I.T. and another a graduate and faculty member of the Cambridge School. Also on the roster was Charles Eliot's nephew, Charles W. Eliot, 2nd, still a lively and influential figure today. The work illustrated reflects the 1920s emphasis on garden and estate design, with important examples by Warren Manning, Olmsted Brothers, Arthur Shurcliff and others, but there were also park, playground and subdivision plans by John Nolen and Manning and campus plans by Bremer W. Pond.²⁹ Over the preceding century, a long road had been travelled, but—thanks to the education, formal and informal, passed from one generation to the next—it was an avenue, which, despite twists and turns, had remarkable continuity.



Plate 1 "Villeneuve-lez-Avignon in the year 1387." (Lawrence B. Anderson, 1931). The pale color and simplified forms of this landscape perspective, reveal the Modern interests of a Beaux-Arts-trained architect and anticipate his contributions to education in urban design over five decades. The drawing and its companion "The Bridge at Avignon" were executed during Anderson's residence in Europe after winning the coveted 23rd Paris Prize in 1930. There the architect was exposed, first hand, to European Modernism in France, where he was also premiated at the Ecole des Beaux-Arts. But his journey to Scandinavia established contacts and the influence of ideas on design that would later appear at M.I.T. Anderson sees the form and shape of Avignon as a whole, the structure of its streets and its relationship to a specific landscape; he sees Avignon as Urban Design.

Plate 2 Design for Island Stations, "Excelsior," Boston Elevated Railway Co., Boston (Alexander Wadsworth Longfellow, Jr., 1897). The 1890s saw the building of Boston's first elevated railroad; the Orange Line. The winning competition project by architect A. W. Longfellow, Jr., who earlier had designed the Carnegie Institute in Pittsburgh, reflects his skilled pen trained at the Ecole des Beaux-Arts in Paris. The same modular station of iron and glass was erected on various stops of the Orange Line in different configurations. This drawing was the winner among ten submissions from competing architects. Three watercolor and ink competition drawings by Longfellow depict ornament in gold leaf, yet reveal a fully functional and versatile station design. Longfellow had worked on several railroad stations with H. H. Richardson, while a draughtsman in his office, and signed himself "Excelsior," a name drawn from the title of a poem by his uncle Henry Wadsworth Longfellow. The Orange Line stations were demolished in 1987.





Plate 3 "A Municipal Observatory." (Robert C. Dean, 1926). Elevation 1/16" to the foot, watercolor, pen and ink. Grade V, Design 4752, Problem 5. First Medal Class A V, Beaux-Arts Institute of Design, N.Y., Municipal Art Society Prize. The spectacular dark wash and detail of this project and the close reflection of the elevation and plan were an ideal development of the Beaux-Arts design system. Most of Dean's prize drawings, now in the M.I.T. Museum, use baroque light, and fine landscape to enhance his designs. Here the dome is silhouetted against the night sky; the liberally distributed telescopes on its walls provide for an almost military aspect in the observatory and anticipate the architect's later career, while the curved approach road echoes the shape of the dome. The organizing principles within such a drawing were taught by Dean in design studio at M.I.T. between 1930 and 1941 to a whole generation of Boston architects.

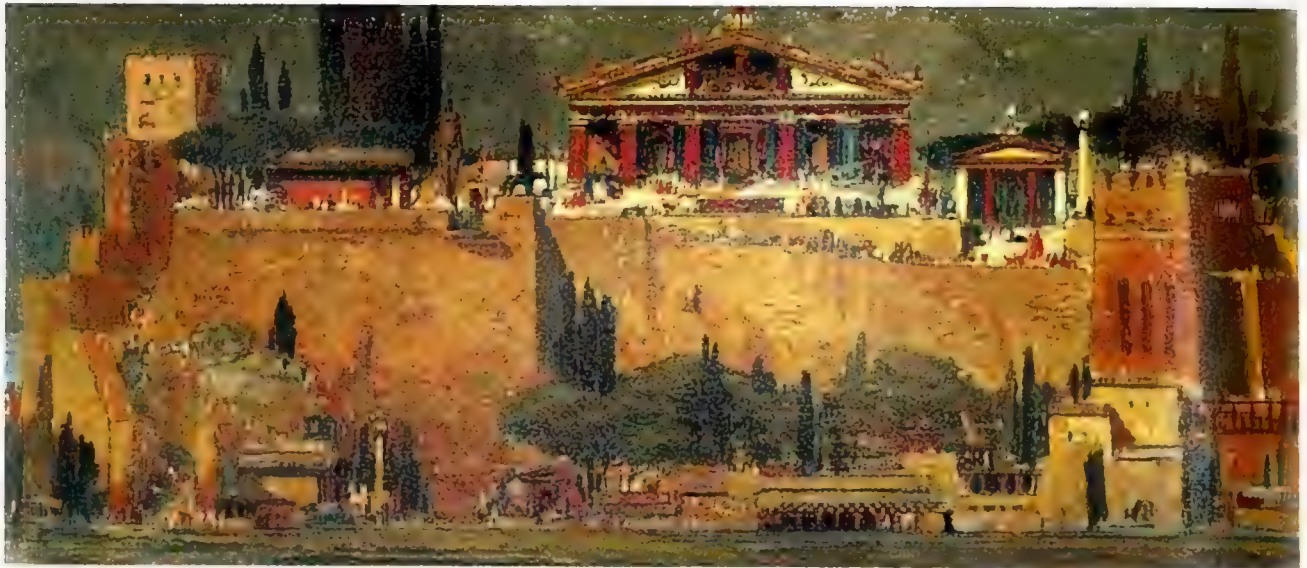


Plate 4 "Rome." Drawing with Tempera (Jacques Carlu, 1922). The dynamic French, Head of Design at M.I.T. 1924–1934 was a recipient of the Prix de Rome and ran the Fontainebleau School in France during the summer. His strong color and Art Deco drawings were later influential with his M.I.T. and B.A.C. students. Carlu spent ten years as head of design at M.I.T. before returning to Paris. While comparatively little new building in the Art Deco style appeared in Boston (in comparison to New York), Carlu set the Parisian standard. His best known European building, the Palais de Chaillot in Paris, designed with L. H. Boileau and Léon Azéma in 1937, was monumental like his early drawing of Rome.

Plate 5 "Interior of an Ocean Liner." B.A.C. student project (Joseph DiStefano, 1937). Jacques Carlu of M.I.T. and J. J. Halfner of Harvard served as judges for the fourth and fifth year B.A.C. design classes. Carlu's decorations for ocean liners and for the ballroom at Boston's Ritz Carlton hotel set a standard for students in all three schools in the 1920s. Because of the educational imperative of the Boston Architectural Club, architecturally talented students such as DiStefano were encouraged to move into the profession. The quality of this drawing is fully the equal of those produced in the academic institutions in Cambridge; none anticipated in style the European Modernism that arrived with Walter Gropius at Harvard in 1936. "Because of its dependence on support of the more conservative members of the profession," says Arcangelo Cascieri, dean of the B.A.C., "its program was resistant to change in comparison with Harvard and M.I.T."

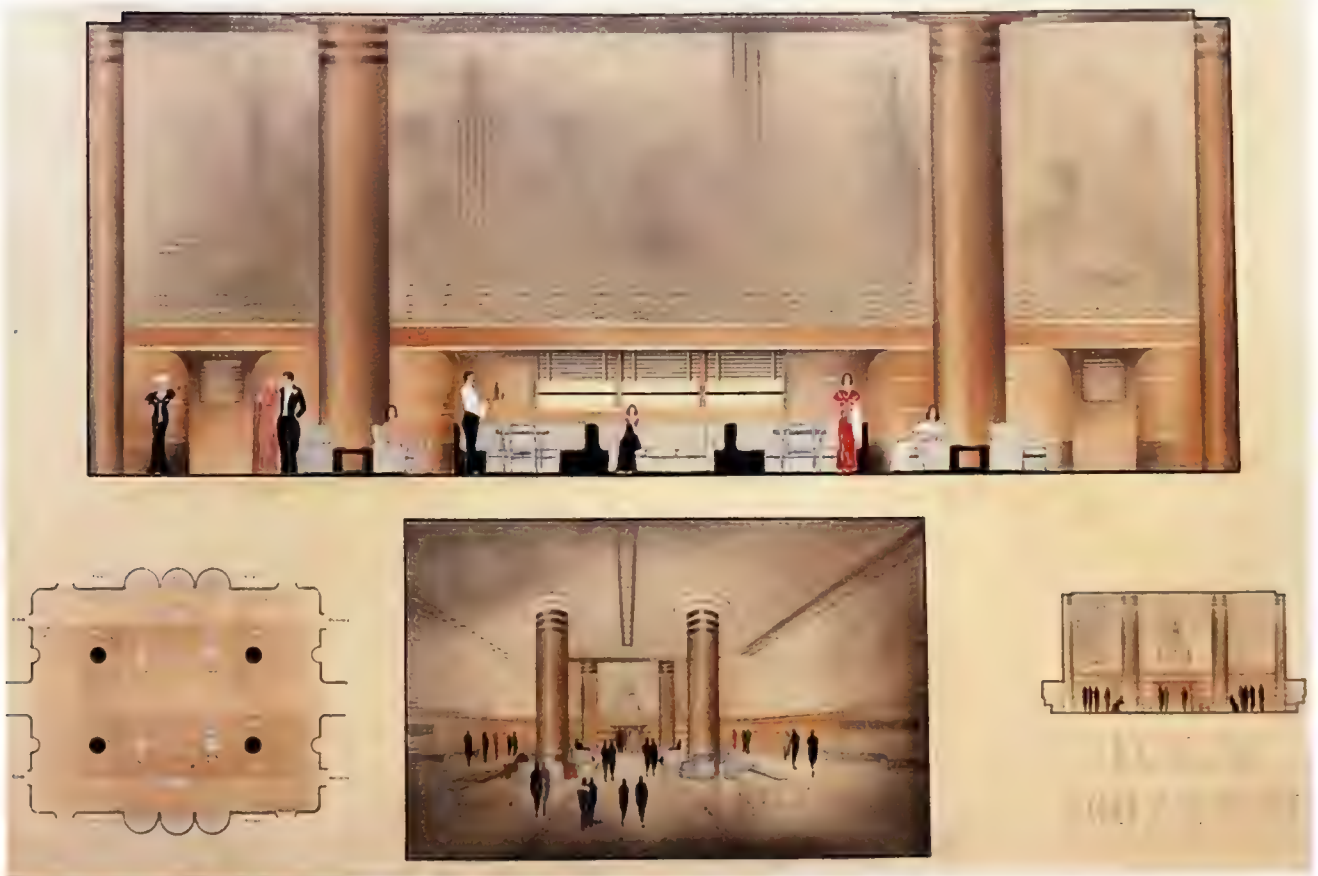




Plate 6 Aga Kahn Medical College, Karachi, Pakistan (Thomas Payette & Associates, Inc. and Mozhan Khadem, design consultant, 1988). Overseas, regional characteristics are interpreted using native building materials and forms by a contextual Boston architect in an award-winning design. The native decorative arts assume a new importance; works of local tile makers, muquarnas workers and metal artisans are incorporated. More fundamental is the spatial language of the inner courtyards, partially screened one from the other, that demonstrate deep understanding of the architectural language of Islam, reapplied to creative new purpose. The required interface of tradition and innovation, demanding both versatility and imagination has come to characterize work of Boston's finest architects; somehow they sense well the regional spirit of other cultures.



Plate 7 Waxman House, Block Island, Rhode Island (Jeremiah Eck, 1987). The New England regional tradition of wooden houses, locked into the landscape, runs from the seventeenth century to the present. This house won the Boston Globe Export Award in 1988. The presence of the sea that accompanied the great Shingle Style mansions of the nineteenth century seems to continue. Combined in this design are the generic vernacular forms that inspired the small Cape Cod house of Royal Barry Wills in the 1930s. New England regionalism is as strong and poetic in building today as when Edward Hopper, Andrew Wyeth and Robert Frost perpetuated its image in other forms of art.



Plate 8 Science Center, Wellesley College, Wellesley (Perry, Dean, Stahl & Rogers, 1978). Boston's "Colonial Williamsburg" firm received the Harleston Parker Award in 1988 from the Boston Society of Architects for a modern design which integrates new building and old on Wellesley College's Gothic campus. The interior is equally spectacular with a three-story skylit atrium bridged by free-standing walkways joining this innovative addition to the rich brick walls of old Sage Hall. The discipline of this design interfaces the new and the old to create yet another architecture that encompasses both. The small-scale articulation of this elevation translates the spirit of the Wellesley College campus into a present dimension with multiple venting stacks for laboratories that puncture the sky.

3 BOSTON ARCHITECTS: A TRAINED PROFESSION 1889–1930

Margaret Henderson Floyd

In the quieter work of Boston the precedents of the Italian Renaissance and of our own Colonial or Georgian work lie at the foundation of most recent design. These two influences often mingle, and are not seldom handled with a freedom and with a regard for principle and law rather than mere precedent . . . which is promising and which has already resulted in work that is the natural and orderly expression of local and present conditions. The recent revival of Georgian work in England and the renewed study of the work of Wren, Hawksmoor, and Gibbs has not been without its influence; while a good deal of the ecclesiastical work in and about Boston shows a loving study of the mediaeval parish churches of England and the influence of modern English church work, such as is found, perhaps, to the same extent, nowhere else in the United States.¹ —H. Langford Warren, *Boston Architectural Club Exhibition Catalogue*, 1899

3.1 HARVARD GRADUATE SCHOOL OF DESIGN, 1893

So wrote Herbert Langford Warren, Englishman, who established the architectural program at Harvard in 1893. There were marked differences between the condition of architecture by the century's end and the unruly pioneering epoch of the 1860s when the M.I.T. program had been initiated. English architecture itself had moved from Ruskin to Wren and Boston followed suit in style, although the longstanding popularity of medieval forms remained strong. The program was established, however, with an aim to espouse the High Arts of Europe, comparable to the new subject matter then being taught at Harvard by Professor Charles Eliot Norton.² There had everywhere been an increase of interest in the Renaissance, accompanying the rise of classicism, so that by the time of the World's Columbian Exposition of 1893 in Chicago, the Fine Arts realm was differentiated, both in quality and objective, from that of the more pragmatic industrial and decorative arts movement emanating from South Kensington at mid-century.³ By the 1890s the very success of the English movement had spawned an entire generation of Arts and Crafts enthusiasts, potters, weavers and tile makers, who were enthusiastically at work as craftsmen within the decorative arts field. On the other hand, a return to the concept of a royal collection, focussing largely on continental painting, governed Mrs. Jack Gardner and her adviser, Bernard Berenson, as she planned her palace, "Fenway Court" (1900).⁴

Boston architects were well-represented in Chicago in 1893 and the School of the Museum of Fine Arts initiated their first summer school there.⁵ The buildings at the exhibition by Peabody & Stearns and other Boston architects were Classical in style, one of the most notable being the Woman's Building by M.I.T. graduate Sophia Hayden. Its proportions demonstrated the professional stan-



Corey Cage, Soldiers Field, Harvard University, Cambridge (H. Langford Warren, 1896). The director of Harvard's new Architectural School, a draughtsman from H. H. Richardson's office, was much influenced by the Japanese Pavilion at the World's Columbian Exposition in Chicago. He designed this first permanent structure at Soldier's Field in a style which is derived from its plan. The building was executed with the help of the Harvard Engineering School faculty in reinforced concrete, a material soon to be exploited at the Harvard Stadium (1902).

dard of the Beaux-Arts program then in place at M.I.T. The interior was majestically proportioned with loggias, while a skylight illuminated the space from above.⁶

The architectural profession in the 1890s in Boston was still largely of English background, but had grown substantively. The Boston urban area underwent expansion as well, with growth in the Back Bay and the streetcar suburbs of Brookline and Cambridge. Dorchester, the southern section of the city, also began absorbing the increasing population.⁷ The style of multi-family housing in these areas developed along the same lines as that of the largely wooden, vernacular single-family dwellings of the epoch. These builder-designed residential structures mirrored architect-designed buildings in their move from the rich, medieval colors of the 1870s and 1880s into the lighter colors and classical details of the 1890s.

The development of residential housing profited from the German training of J. P. Putnam, brother-in-law of Peabody. His education was unique among Boston architects of his time. Putnam arrived in Paris in 1870 just as the city fell to the Germans and the schools closed. Rather than returning to Boston, Putnam consequently studied in Berlin at the Bauakademie. Putnam was more focussed on the technics than the aesthetics of architecture. His book *The Open Hearth for All Ages* (1876) introduced new methods of ventilation. He became a pioneer in apartment and hotel design in the 1890s, making a contribution to architecture that was more social than aesthetic. His apartment hotels set a new precedent for urban living, combining stylistic sources from both the nineteenth-century medieval traditions such as Richardson's Romanesque style, and the classicism which gained ascendancy after the World's Columbian Exposition of 1893.⁸

Putnam's design for the Commonwealth Hotel was an elegant space, but his apartment house "Haddon Hall" on Commonwealth Avenue caused deep concern in Boston. A perspective drawing published in the *American Architect*



Woman's Building, World's Columbian Exposition, Chicago, Ill. (Sophia Hayden with Minerva Parker, 1893). The architect who won the competition for the Woman's Building at the World's Columbian Exposition was one of many Boston architects represented. Minerva Parker, a Philadelphia architect, helped to supervise the actual construction of the building, which was one of the most distinguished at the Fair.

Interior, Woman's Building, World's Columbian Exposition, Chicago, Ill. (Sophia Hayden with Minerva Parker, 1893). From W. H. Jackson, *Jackson's Famous Pictures of the World's Fair* (Chicago, White City Art Company, 1895): unnumbered plate. The Boston Athenaeum. The interior of the Woman's Building was a spacious classical hallway toptit with a skylight; the sort of room which would be widely used for libraries throughout the nation and resembles Charles McKim's Bates Reading Room at the Boston Public Library, which was then under construction.

and *Building News* in 1895 demonstrates unequivocally its lack of relationship to either the uniform mansardic streetscape of the Back Bay to the left or the Gothic elevation and spire of Ware & Van Brunt's First Church Boston of 1866. "Haddon Hall" and Putnam prompted the creation of zoning laws in Boston to restrict tall building until after World War I. Curiously, it would be a proposal for highrise buildings on Commonwealth Avenue in 1963 that would again provoke new zoning restrictions in Boston (see Chapter 5, Introduction, for Lawrence Anderson's Committee for Commonwealth Avenue).⁹

Despite these developments in Boston, classicism and the Beaux-Arts design system were dominant educationally by the time of the founding of Harvard's Department of Architecture in 1893; but Langford Warren attempted to maintain a curricular balance, notwithstanding. History was always a central component of the Harvard program, and an emphasis that would include the medieval styles was established. The pragmatic, industrial arts that had been a central concern of William Ware in the 1860s at M.I.T. were never, however, a part of the Harvard program. Although Warren himself was much in sympathy with the English tradition, serving as President of the Boston Society of Arts and Crafts from 1904 until his death in 1914, an emphasis on practical artisanry could not be integrated into the Harvard curriculum.¹⁰ This committed high arts tradition was particularly at odds with the democratic and collaborative objectives of Walter Gropius when he arrived in 1936, because for the Bauhaus, aesthetic considerations were secondary to method.

The first home of Harvard's Architectural School was in the remodelled Carey Athletic Building in the North Yard (1888), a Richardsonian design by A. W. Longfellow, Jr., who had been a fellow draughtsman and friend of Warren in Richardson's office. Warren designed the Japanese-inspired new Carey Cage at Soldiers Field and presumably remodelled the Carey Athletic Building. In 1899 a new building, Robinson Hall, was given to the Department of Architecture and Landscape Architecture. Completed in 1902 after designs by Charles McKim, its Classical style expressed a further move of the school into

Haddon Hall (J. P. Putnam, 1894) with the First Parish Church (Ware & Van Brunt, 1866), Marlborough Street, Boston. The great shock of this high-rise on Commonwealth Avenue produced zoning laws on height limit which controlled Boston building into the twentieth century. Its German-trained architect was more concerned with light, air and health than with conformity.



Interior, Commonwealth Hotel, Boston (J. Pickering Putnam, c. 1895). J. P. Putnam was much in advance of his Boston peers in his interest in the development of the apartment hotel, which relieved women from cooking and household responsibilities.





Beaux-Arts education; that style now also began to appear in Boston buildings.¹¹ By 1912 Professor E. J. A. Duquesne had been called in from Paris, and J. J. Haffner took over advanced design in 1922 to give the department a twenty-year history of Ecole teaching before the arrival of Gropius.¹² But while the Ecole des Beaux-Arts program and new building were accepted in the Department of Architecture, A. W. Longfellow's Phillips Brooks House (1897) introduced American eighteenth-century, Georgian Revival design as well into Harvard Yard. As Langford Warren had predicted in 1899, an ongoing concern with English models continued to characterize Boston architecture. Certainly at Harvard in Coolidge, Shepley, Bulfinch & Abbott's River Houses and the new buildings cloistering Harvard Yard, an English image persisted through the first quarter of the twentieth century and beyond.¹³

Robinson Hall, Harvard University, Cambridge (Charles McKim, 1902–1904). The Ruskinian Gothic tower of Memorial Hall rises behind it and Richardson's Sever Hall dominates from one side, but the new Architectural School announced an awareness of Beaux-Arts classicism with Ionic columns and ancient relics/reliefs at its entrance. Eventually, between 1937–1952 Walter Gropius taught the most radical architectural program in the nation from within its walls.

3.2 THE BOSTON ARCHITECTURAL CLUB, 1889

The Architectural Center with its funny old door and leaded glass windows, its Great Hall, redolent with recollections of good fellowship, inspiring discourse from the profession's leaders, the sound of music and costumed gaiety. All hallowed memories. The life force of the center may swing with the wrecker's punch and burgeon anew but, in a measure, it will have to start from scratch, for those recollections are inseparable from the building that first sheltered them.¹⁴ —Royal Barry Wills, "Alas Poor Boston, I Knew Her Well" c. 1960.

The forum in which the larger architectural community met was the Boston Architectural Club. Founded in 1889, it succeeded an initial Architectural Association of 1883 and was intended from the start to include those who were not architects and therefore did not qualify for membership in the Boston Society of Architects. On 11 December, 1889 the club was incorporated "for the

purpose of associating those interested in the profession of architecture with a view to mutual encouragement and help in studies, and acquiring and maintaining suitable premises, property, etc., necessary to a social club . . . and such as may be needed for public lectures, exhibitions, classes and entertainment.”¹⁵ The incorporators were C. H. Blackall, Arthur G. Everett, R. Clipston Sturgis, Edward T. Stevens, W. T. Partridge, Edward C. Cabot, Robert S. Peabody, Albert H. Davenport, William C. Norris, George J. Porter, Robert D. Andrews and C. Howard Walker. The educational breadth of this constituency was reflected in the participation of such diverse figures as E. C. Cabot, president of the Boston Society of Architects; Albert Davenport, an important furniture manufacturer and designer; C. Howard Walker and R. Clipston Sturgis, successors to the English-oriented office of John Hubbard Sturgis; and Everett, Stevens, Andrews and Peabody, all M.I.T. graduates. Peabody and his one-time draughtsman Clarence Blackall who became the first president of the club, had attended the Ecole des Beaux-Arts, and almost all had travelled extensively.¹⁶

While a social objective was intended by the founders of the Boston Architectural Club, an educational one was also central. Classes were immediately set up on an atelier system to coordinate with the M.I.T. program; the delineator David Gregg of M.I.T. taught drawing, and courses were offered in French.¹⁷ The quality of drawing instruction at the B.A.C. continued to be exceptional, later including participation by Professor Despradelle of M.I.T., Joseph Pennell, the noted illustrator and artist, and many others. Exhibitions by winners of the Rotch Travelling Fellowship were a regular part of the program, beginning with George Newton. Watercolors and sketches by E. Eldon Deane, the English delineator who did much illustration for the *American Architect and Building News*, were shown in 1890. These exhibitions that required large spaces for display of drawings were held at the Museum, Horticultural Hall, the Boston Art Club and elsewhere from year to year. Frequent lectures and architectural field trips were also part of the program.¹⁸

The Club was not wealthy, and during the early years it migrated several times within the city. Its first quarters in 1889 were at 6 Hamilton Place, a large room with tables, chairs, bookshelves and a piano in one corner.¹⁹ Since the Boston Society of Architects had no rooms and “its meetings [were] of a dining order,” its members soon came to use and enjoy the B.A.C., in whose clubhouse the Society eventually established headquarters and shared space for many decades.²⁰ By 1890 the Club had occupied two floors at 6 Hamilton Place, then moved to 5 Tremont Place by 1895, with several interim sites considered. By 1900 it was housed at 14 Somerset Street, which was expanded in 1910 to include 16 Somerset Street; this became the permanent quarters of the Club. Before the move to Somerset Street, classes were held in various rented spaces on School Street and at M.I.T. (with the cooperation of Professor Despradelle), but the Somerset Street building allowed the program (except for large exhibitions) to be coordinated in one place, with room as well for the Boston Society of Architects.

Existing records do not completely document the sequence of decisions regarding conversion of the Somerset Street building, but the Gothic design that was adopted for the clubhouse provides documentation of the Boston Architectural Club’s stylistic direction. The authorship of the changes in the So-

merset Street building is also unsubstantiated, but appears to have been in large part a communal affair with such decorative artists as Frances Bacon and Albert Haberstrohe contributing advice.²¹ The first club interior of 14 Somerset Street was described by the secretary in 1900:

In the matter of fixing up the rooms we had quite a problem, we had so much to do and not much money to do it with, but we hope we have solved the problem satisfactorily. We have kept all finish and furniture very simple and have used existing finish where possible. The club room walls we panelled in long panels from floor to ceiling, painted green, mouldings dark red. In the library we have built a large bookcase with leaded glass doors along one side of the room, a window seat on the opposite side, and then on the fireplace side, we have sheathed the walls to the height of the top of the bookcase with wide matched boards and put a shelf on top. This will make a very good place to hang sketches and notices. It might be called a bulletin board. In the top story we have a large club room which can be divided into two class rooms by folding doors when required. At one end of the room we have raised a stage one step up from the floor. Leading from this room and connected with it by a double door, is a committee room, which can be opened up on club nights and form part of the club rooms.²²

A finely carved Gothic door was created in 1905, before the enlargement of the headquarters to include 16 Somerset Street in 1910, so that several

Exterior, Boston Architectural Club, 16 Somerset Street (remodelled, 1910). The headquarters of the Boston Architectural Club on Somerset Street were rehabilitated into studios and offices from a simple Beacon Hill house thrown together with the adjacent structure.

Memorial Library, Boston Architectural Club, 16 Somerset Street (attributed to F. L. Witton, 1920). The club always had an architectural library, but the panelled room with its marble mantel was built to house a growing collection of volumes as a memorial to those fallen in the war. The room was moved to 320 Newbury Street intact. Many of the furnishings and books are from Robert Peabody's library.





stages of improvement clearly took place. The final headquarters (except for the door) remained unprepossessing from the exterior, but were described by Royal Barry Wills as commodious within. Already at the carved door, the visitor was apprised of the architectural scheme of the Great Hall behind it. Stairs, with a wrought iron balcony above, led down from the street level into the two story, medieval Great Hall that was comprised of the basement and original first story. Its tiled floor, beamed ceiling, and finely proportioned, hooded fireplace with carved corbels were enhanced by tapestries hung on the walls. The quality of both the entrance door (now reinstalled at 320 Newbury Street) and the fireplace suggests that J. Kirschmayer, a member of the Club, may well have been the sculptor. Both R. Clipston Sturgis and Ralph Adams Cram were club members at this period and must at least have approved the design. A bank of mullioned leaded glass windows opened from the back of the Great Hall, to complete the medieval character of the space.²³

Great Hall, Boston Architectural Club, 16 Somerset Street (1910). The Great Hall was reached by a staircase leading down from the street and incorporated the first floor and the basement. Used for meetings and lectures it was a notable Gothic room, the designer of which is presently unknown. The style suggests several prominent Boston architects who were active in the early years of the Club, including Ralph Adams Cram, Bertram Goodhue, and R. Clipston Sturgis.



The second floor housed offices and the headquarters for the Boston Society of Architects, while the floors above were used for studios. Only in 1919 after World War I was the Memorial Library constructed to accommodate the growing collection of architectural books which had been purchased or given to the club. This library served as the sole academic resource generic to the Club and Center until the move to 320 Newbury Street in 1967; here the library room was re-erected intact. Only in the Memorial Library, possibly built from a design by Rotch Fellowship winner F. L. Witton, did any sort of Classical detail enter the building.²⁴ The library, now enlarged with gifts from the estates of both Robert Peabody and R. Clipston Sturgis, contains furniture from Robert Peabody's own library. Today the Memorial Library is one of the great treasures of the Boston Architectural Center, used regularly as a board room for meetings and located within a growing contemporary library area that serves the primary needs of the school.



Staircase, Great Hall, Boston Architectural Club, 16 Somerset Street (1910). An interior stair led from street level down into the two story Great Hall. Its size was not suggested by the building's exterior.

Studios, Boston Architectural Club, 16 Somerset Street (N.D.). The studios and layout of the building were a rabbit warren of activity and the social focus of the architectural profession in Boston until demolition in 1965.

Fireplace detail, Great Hall, Boston Architectural Club, 16 Somerset Street (1910). The designers of the hooded fireplace, beamed ceiling and balcony are unknown, but these features suggest the style of Ralph Adams Cram and R. Clipston Sturgis, architects enamored of the Gothic style that provides a stately room for meetings. The carving may have been by Kirschmayer.



Entrance Door, Boston Architectural Club (attributed to Johannes Kirschmayer, 1905), now in Boston Architectural Center, 320 Newbury Street. The door, finely carved in Medieval style has followed the club; its style reflected the early focus of the Boston architectural profession.

3.3 BOSTON: A NATIONAL IMPACT, 1889–1914

The history of Massachusetts has been tied closely to her industry. Just as the booming China trade in Samuel McIntire's Federal Salem moved in the mid-nineteenth century to Boston's harbor (which accommodated large clipper ships and the early steamships), the whaling days of New Bedford gave way to the oil fields of Pennsylvania and the rise of Pittsburgh. After World War II, the shipping of cotton to the north for textile production halted with the movement of factories to the south for cheap labor.²⁵ Robert Peabody's Custom House Tower (1909–1914) thus represented a last glorious moment for the Port of Boston. Although continuing as an educational and financial center, Massachusetts did not recover from these economic shifts until the late twentieth century. The physical limitations of the peninsula also drew Boston out of the mainstream of building opportunity, although much of the intellectual leadership of the national architectural profession emanated from its schools.²⁶

The yearbooks and exhibition publications of the Boston Architectural Club, now in the Memorial Library, give us a unique, first-hand account of the interests, education, and the objectives of architects and the state of architecture in Boston in the early twentieth century. Membership lists and lists of exhibitors in the *Yearbooks* of the 1890s clarify the focus of members of the architectural profession in the city. Exhibiting widely were such English architects as Mervyn Macartney and in particular Ernest George and Harold Peto who were commissioned by Isabella Stewart Gardner to design a great altarpiece (carved and shipped over from England) for John Hubbard Sturgis's High Anglican Church of the Advent on Brimmer Street (1874), completed by Clipston Sturgis in the late 1880s. The architects of this English firm exhibited their work frequently as members of the Boston Architectural Club and visited the city in person.²⁷ Boston's unique English orientation and adherence to tradition clearly continued to appeal to architects and clients elsewhere.

There was a national vision on the part of the Boston profession in the years before World War I that emerges in the parallel patterns of leadership in the B.A.C. and the American Institute of Architects (A.I.A.). Robert Peabody, a prominent B.A.C. member, was president of the A.I.A. in 1901–1902. R. Clipston Sturgis was president in 1914–1915. His influence was extended through early correspondence and contact with architects in other cities as the secretary of the Boston Architectural Club from its founding through the 1890s. During Sturgis's tenure as president of the A.I.A., its offices were consolidated in Washington, D.C. into a national organization. Sturgis was followed as A.I.A. president by Boston architects Henry H. Kendall (1921–1923) and Charles Maginnis (1937–1939), so that the city's national architectural leadership continued. In contrast to their New York peers, Boston's leaders were not Beaux-Arts-trained.²⁸

From 1889 to 1914, the national influence of Boston architects was especially strong. Ralph Adams Cram, president of the B.S.A., spread his Neo-Gothic Revival from the Hall of the Boston Architectural Club to the educational and ecclesiastical architecture of the nation, completing New York's St. Thomas Church in 1911–1913 with his partner Bertram Grosvenor Goodhue. His final designs for the Cathedral of St. John the Divine in New York City would shortly be accepted. Cram had sponsored the publication of Henry Adams's *Mont St.*



Perkins Institution and Massachusetts School for the Blind, Arsenal Street, Watertown, Massachusetts (R. Clipston Sturgis, 1912). This Gothic tower and its picturesque brick walls were sited on a promontory west of the Watertown Arsenal and overlooked the Boston peninsula recalling the picturesque landscape of England, where its architect had trained and the impact of Boston's Gothic style throughout America.



All Saint's, Brookline (Cram, Goodhue & Ferguson, 1894–1926). The Neo-Gothic movement, which spread nationwide in the early twentieth century was initiated in Boston by the firm which later designed the Cathedral of St. John the Divine in New York City

Michel and Chartres (1911) by the A.I.A. and was a leader of the anglophilic early Arts and Crafts circle in Boston, "The Order of the White Rose." In the early 1890s the order published *The Knight Errant*, a periodical modelled on the British *Hobby Horse*, with a medieval typeface designed by Goodhue and printed in the tradition of William Morris's Kelmscott Press.²⁹

Cram and Goodhue were founding members of the Boston Society of Arts and Crafts in 1897, contributing to the first exhibition of that society in 1898 along with numerous Boston architects. A comparison of the exhibition contents of the Boston Arts and Crafts Society in its early years with that of Chicago differentiates the visual orientation of the two cities. An aesthetic medievalism continued in Boston (in the typeface of the B.A.C. *Yearbooks* through 1930, for example). The more socialist aspects of John Ruskin's thinking and that of other British theorists such as William Morris resulted in the stripped-down Mission style furniture publicized in Gustav Stickley's *Craftsman Homes*, associated primarily with the Chicago Arts and Crafts movement which so influenced domestic design in the West.³⁰

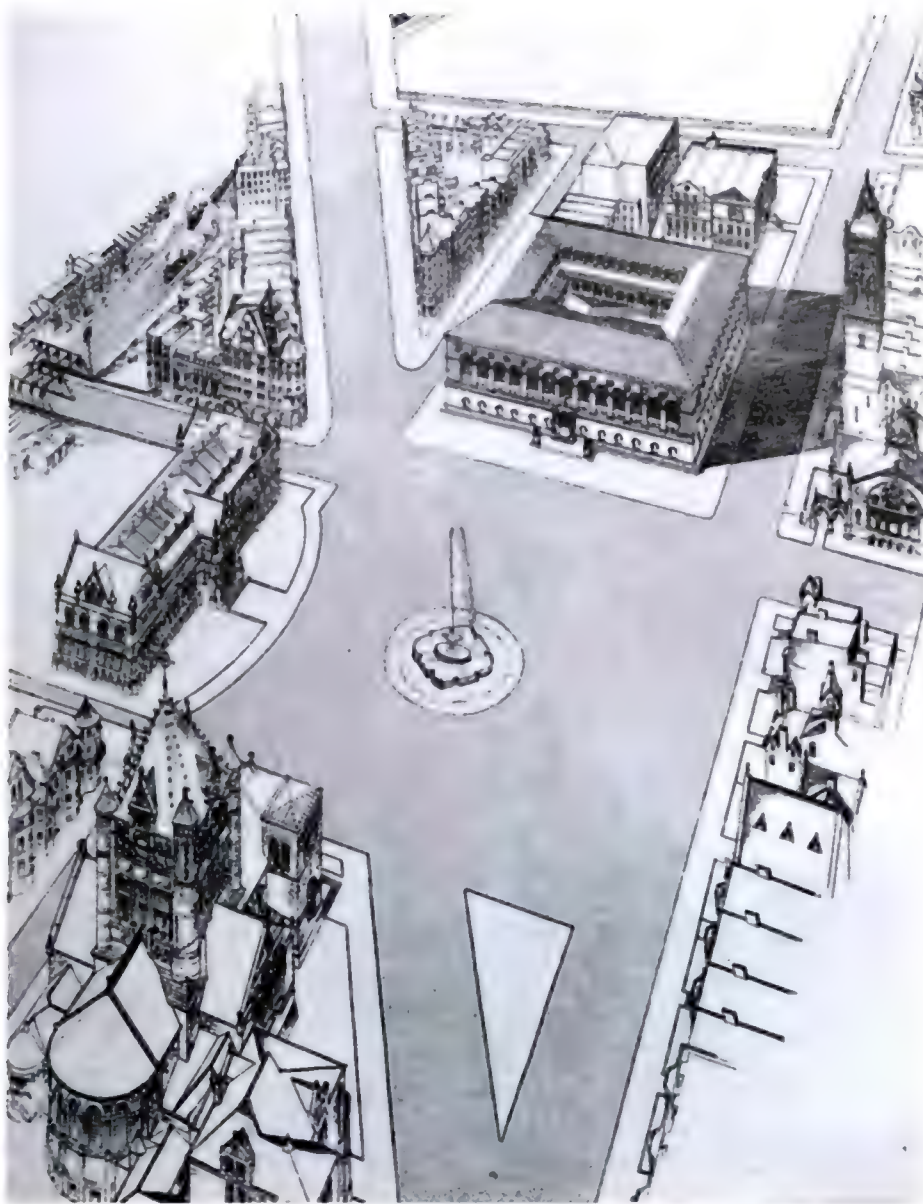
While public buildings during the heyday of the Back Bay had been irregular and picturesque, this subsequent period saw the infiltration of Beaux-Arts influence in such designs as the Board of Trade Building by Winslow & Bigelow (1901) on Custom House Square. This design reflects a Renaissance classicism, heavy with terra cotta ornament that became the preferred mode for commercial design. Another instance of such Classical detail was at the William G. Filene's Department Store, designed in 1912 by Daniel Burnham of Chicago. It was unusual in Boston to bring in an architect from elsewhere, but Burnham was a noted designer of such stores in other cities and had his Boston credentials through work with Charles McKim in Washington, D.C. (See Chapter 2) and for Harvard.³¹ The concave facade of the Filene's store, with its great green engaged columns of terra cotta, follows the curve of Washington Street, forming one of Boston's most memorable, if uncharacteristic buildings.



Custom House Tower, Boston: Perspective sketch from Boston Harbor (Robert Swain Peabody, 1907–1914). The architect was an avid sailor who envisioned his last great design from the sea. As with much of Peabody's work, a Classical style is combined with picturesque siting and sensitivity to the landscape that characterized the New England regional tradition



Custom House Square, Boston, with the Grain Exchange Building (Shepley, Rutan & Coolidge, 1892) and the Board of Trade Building (Winslow & Bigelow, 1901). Developments at Custom House Square introduced the Richardsonian Grain Exchange of that architect's successor firm Shepley, Rutan & Coolidge, whose rounded form is a Boston landmark. With its giant, terra cotta corbelling and rich, brick walls, the robust Renaissance detailing of the adjacent Board of Trade Building by Winslow & Wetherell typifies the classicizing architecture of Boston at the turn of the twentieth century.



Plan for the Boston Public Library and Copley Square (Charles McKim, 1888) The Classical style was introduced for public building on Copley Square only a decade after completion of H. H. Richardson's Romanesque, Trinity Church

Boston architects such as Robert Peabody, who in the early 1880s had established the Shingle style in works such as "Kraggsyde" at Manchester-by-the-Sea (1882), also began to incorporate Classical details in their work. Peabody's thirteen hundred or more commissions, like Ralph Adams Cram's, had a national impact. During the 1880s and through World War I he produced more than a dozen major commercial buildings in Boston's financial district alone. Indeed, State Street was designed largely by Peabody & Stearns, including the Exchange Building. Peabody had been involved in a long series of urban planning proposals for Boston and headed the Parks Commission, often working with Olmsted, in these years. His work carried on from that of Charles McKim in the early planning of Copley Square in 1888 and anticipated the great concerns of the twentieth century for urban design (see Chapter 5) rather than individual buildings. Urban planning pressures were already great at that time in Boston.³²



Wm. H. Filene's Department Store, Washington and Summer Streets, Boston (D. H. Burnham, 1912) Western architects received few commissions in Boston, but Burnham had been consulting at Harvard on the campus plan and was acknowledged as the master of department store architecture elsewhere in the country

The Berkeley Building, 460 Boylston Street (Codman & Despradelle, 1905), restored by Notter, Feingold & Alexander. The terra cotta-clad, steel frame of this festive office building recalled Parisian stores and was designed by the French architect who headed M.I.T.'s design program



The Custom House Tower, Peabody's most innovative structure, came at the end of his life. Here he gutted the interior of Ammi B. Young's granite building to insert a steel-framed tower (1907–1914). The scarcity of downtown land open for construction forced the Custom Tower to ascend in excess of zoning limitations. Fortunately the tower was a federal project and thus exempt from municipal zoning ordinances. Peabody had other important federal commissions as well, including the Louisiana Purchase Exhibition in St. Louis in 1904 and the Buffalo Exposition in 1901.³³

Boston's park and transportation system evolved into one of the most carefully and aesthetically designed in the nation. This period saw the erection of the Orange Line, Boston's first elevated railroad. An elegant island station designed by A.W. Longfellow, Jr. won a large competition (see Plate 2) and was built in many different locations and configurations. The transportation system and Olmsted's Emerald Necklace of parks began to develop with the Fenway and the Jamaicaway to the west.³⁴

Mrs. Jack Gardner's prominence, her donation of the altarpiece at the Church of the Advent and in collaboration with Willard Sears her incorporation of architectural fragments from Italy in her palace, "Fenway Court" (1900), set a new, archaeological standard for Renaissance design in Boston and nationally for museums. For her purchase of art objects in this period she relied upon the advice of Bernard Berenson, America's great connoisseur of the Italian Renaissance, who had studied Art History at Harvard under Charles Eliot Norton.³⁵ During the first quarter of the century Allen & Collens, yet another Boston ecclesiastical firm, extended her theories by reassembling imported architectural fragments at the Cloisters, and they also built the Riverside Church in New York. That the Edwardian classicism and Neo-Gothic focus of Boston design was supremely successful, is evidenced in its emulation nationwide and

Fenway Court, The Fenway, Boston (Isabella Stewart Gardner & Willard F. Sears, 1900). Fragments of art objects originally installed in Mrs. Gardner's home at 154 Beacon Street by the Boston architect John Hubbard Sturgis were reinstalled in the fabric of her Venetian palace on the Fenway by Willard F. Sears. This imaginative design anticipated the importation of European architectural fragments that characterized the archaeological approach of the twentieth century. Fenway Court introduced a Renaissance standard to the art world of Boston.



Carnegie Institute and Library, Pittsburgh (Longfellow, Alden & Harlow, 1891–1907). As building opportunity slowed in Boston, the draughtsmen of Richardson (Longfellow, Alden) and McKim (Harlow) joined forces in 1886 after his death to become the prime designers of Pittsburgh, Penn. The Carnegie Institute design is based on the Boston Public Library, but with two Richardsonian towers.



the repeated submission at the Boston Architectural Club exhibitions of work by such architects as Frank Miles Day of Philadelphia and his partner Charles Klauder.

In the face of escalating conflict in Europe between the wars, the popular focus of Boston and most other eastern cities, turned to a rising interest in American colonial life and architecture. The colonial architecture of Harvard and the Gothic towers of Wellesley and Boston Colleges well demonstrate the underlying thrust of architectural design in Boston, and this thrust was carried coast to coast.

4 THE CRISIS OF MODERNISM IN ARCHITECTURAL EDUCATION: 1919–1959

INTRODUCTION

Margaret Henderson Floyd

During the course of the last two or three generations, architecture degenerated into a florid aestheticism, as weak as it was sentimental, in which the art of building became synonymous with meticulous concealment of the verities of structure under a welter of heterogeneous ornament. Bemused with academic conventions, architects lost touch with the rapid progress of technical developments. Their "architecture" was that which the Bauhaus emphatically rejected.¹ —Walter Gropius, *The New Architecture and the Bauhaus*, 1936

In 1936, President James Bryant Conant, who maintained strong ties to German technology, hired Walter Gropius to head the School of Architecture at Harvard.² Dean Joseph Hudnut had recommended Gropius's appointment, which occurred at the retirement of J. J. Haffner and in the face of Nazism threatening Europe.³ The crisis of Modernism thus hit Boston just as Harvard was celebrating its tercentennial in 1936. The arrival of the Bauhaus theorist was greeted with national acclaim in the press, but he opened a schism in Boston architectural education. The Bauhaus movement was forced to confront the extraordinary success of at least three Boston firms. Perry, Shaw & Hepburn was then completing the restoration of Colonial Williamsburg. A marine architect from M.I.T., Royal Barry Wills of Melrose, had won the National Home Building Award of 1932 for his small Cape Cod house, a design that embodied an American vision that still persists. Finally, H. H. Richardson's successor firm, Coolidge, Shepley, Bulfinch & Abbott, was finishing the great Harvard River Houses and Memorial Church.⁴ When one considers that these firms were almost the only architectural practices operating in the black during the Depression years, it becomes clear why the change to Modernism was so explosive. Where was Gropius's anchor of patronage except with his students and in a small segment of the profession itself? Even Harvard University failed for fourteen years to award him a commission, and Modern buildings did not appear widely in Boston until the 1960s.⁵

With the retirement in 1934 of J. J. Carlu, the French architect heading the design program at M.I.T., Lawrence Anderson, a 1930 graduate of the program, returned from Europe and was appointed the new head of design. Anderson had already been exposed to European Modernism during his three-year Prix de Rome. In Paris he produced Beaux-Arts drawings and was premiated at the Ecole with an esquisse, "Architecture," that included plans of famous buildings surrounding an allegorical central figure.⁶ His travel beyond Paris took him to Germany, the Netherlands, and Scandinavia, where he met

Alvar Aalto in Finland. This encounter laid the groundwork for M.I.T.'s invitation to Aalto later in the decade, after the department had moved from the Boston to the Cambridge campus. A booklet was published shortly after Anderson's arrival, outlining the illustrious history of the architectural program at M.I.T., but with an important innovation: a new program in city planning and urban design which claimed to be the first in America. Anderson's early vision of the importance of city planning and urban design for architecture had enormous effect at M.I.T., and eventually in the city of Boston in the 1960s.⁷ Meanwhile, Dean William Emerson stepped down at M.I.T. after the move of the Architectural School from Boston to Cambridge, and a change took place in the curriculum.⁸ Between 1940 and 1944, while Gropius led the Department of Architecture at Harvard, Walter R. MacCormack was dean and Lawrence Anderson effectively ran the M.I.T. design program. An M.I.T. graduate who had practiced in Cleveland, MacCormack strengthened the school's focus on city planning and, most importantly, invited Alvar Aalto to come to M.I.T. in 1941 as a research professor in Architecture.⁹ The increasing worldwide attention to engineering, technology, and construction methods in architectural education were intensified in the M.I.T. program with the move to Cambridge and the closer association of the Architectural School with the engineering and technical segment of the Institute. For example, Mr. Seaver had taught three years of history when the school was on Boylston Street; in Cambridge the percentage of history to technical subject matter began markedly to decrease.¹⁰ In Boston, students made studio drawings from casts in the Rogers Building, and worked frequently with classes in the architectural galleries of the Museum of Fine Arts; these were now less accessible.

In 1941 the American Collegiate Schools of Architecture began publication of the *Journal of Architectural Education*, wherein discussion focussed on the relationship between cultural and historical study of style and the new importance of engineering in architectural education over the next twenty years.¹¹ This bifurcation of objectives was symptomatic of the time in almost all American architectural schools where the Beaux-Arts system had held. On the other hand, it led to the foundation of the Society of Architectural Historians at Harvard, an expression of the separation of history from the architectural curriculum that had been instituted by Gropius. This condition continued through the war years at M.I.T. until in 1944 William Wilson Wurster of California was appointed to the deanship. Then, with Wurster's new faculty team in place, the program at M.I.T. began to turn around. The inventor of the renowned "Bay style" in San Francisco, the California-educated Wurster had travelled in Europe and obtained his Master of Architecture degree during the war years at Harvard; his pre-eminence as a practicing architect was such that he was given a free hand and full administrative support during his deanship of M.I.T.¹² Wurster's vision was for an American rather than a European program, but one which would match the forward-looking emphasis of the Bauhaus system then in place at Harvard which had produced works such as Coolidge, Shepley, Bulfinch & Abbott's BB Chemical Company on Memorial Drive in Cambridge (1937). Wurster, like Anderson, had been much influenced by the alternate Modernism of Scandinavia's Alvar Aalto and its alignment with the American tradition of architecture in the landscape, epitomized in the collaboration of

Lowell House Courtyard, Harvard University, Cambridge (Coolidge, Shepley, Bulfinch & Abbott, 1929). In the late 1920s Harvard created for its undergraduates seven "Houses," like the colleges of Oxford and Cambridge. Architecturally eclectic Harvard celebrated this triumph with Lowell House named after its president, Abbott Lawrence Lowell.



H. H. Richardson and Frederick Law Olmsted and leading to the designs of Frank Lloyd Wright. This deep affinity in American architecture had been carried from Boston to California by Greene & Greene who attended M.I.T., and Bernard Maybeck's San Francisco work had extended it to a new dimension; now through Wurster it would return to Boston newly invigorated by the Bay Style concept.¹³

The essays of this section focus on the actors in the crisis of Modernism in Boston architectural education. Professor John Coolidge reminisces on the arrival of Gropius at Harvard. I have written on Robert C. Dean, later a principal in the office of Perry, Shaw & Hepburn, who trained under Jacques Carlu in the Beaux-Arts system at M.I.T., winning the scholarship to Carlu's Fontainebleau School in France in 1926.¹⁴ While designing Colonial Revival buildings for Williamsburg and for Harvard, he taught design at M.I.T. during the rise of Modernism and Anderson's introduction of city planning. Incorporating comments from his son Richard Wills and my student Jessica Wills, I have assessed the work of the irrepressible Royal Barry Wills, whose structural understanding of the timber frame house was as deep as Ralph Adams Cram's of the Gothic, and who carried the American public his way. James Lawrence was a student of Lawrence Anderson and Robert Dean at M.I.T. in the early 1930s and recalls the training of those years. He was active in defense of the historic Back Bay zoning ordinances in the 1960s, but also organized the competition for the con-

BB Chemical Company building, Cambridge (Coolidge, Shepley, Bulfinch & Abbott, 1937). One of the finest early Modern buildings in Boston was sited prominently on the Charles River. It reveals the influence of Gropius on Harvard's architects, most of whose other work was in the Georgian style



crete, New Brutalist Boston City Hall and served as a judge for the B.A.C. Building competition. This dual impulse demonstrates the schism between training and experience which faced every architect of that generation. The late Isidor Richmond, winner of the Rotch Travelling Fellowship in 1923 and later president of both the Boston Society of Architects and the B.A.C., wrote fifty years ago about the tentative arrival of "Modernism" (by which he means Art Deco) in Boston.¹⁵ He sketches the relationship of the old to the new city in a speech to the American Institute of Architects about the time of Harvard's tercentennial, a year of confrontation within the profession.

Lawrence Anderson, past president of the American Collegiate Schools of Architecture, is of course in an excellent position to give an overview of M.I.T.'s role in architectural education and of developments in architecture overall. The program at M.I.T. was enriched during the 1940s, not only by the perceptions of Dean William Wurster, but by the talent of the faculty who were brought on board. I have evaluated the larger role of Anderson throughout the book, and in an essay I examine the contributions of Ralph Rapson, who obtained his first degree at the University of Michigan and spent several years at Cranbrook working with the Saarinens. Rapson brought his exposure to the Scandinavian Modernist tradition to M.I.T. in 1944. His charisma as a teacher proved ideal for refocussing the M.I.T. and B.A.C. programs over a period of more than eight years. The practice of Rapson and also that of Boston's Hugh Stubbins, who taught with Gropius at Harvard for thirteen years, have been international in scope and lie within the mainstream of orthodox Modernism. While Rapson never settled in Boston, his was the teaching impact that brought Modernism to the program of the B.A.C. In another essay I have aligned Hugh Stubbins's education with his style, placing him squarely in the center of Boston's educational development. Stubbins, who taught only briefly at the B.A.C., trained a whole generation of architects who spread from Harvard to the far reaches of America. They carried with them Gropius's vision of a new architecture and collaborative Bauhaus methodology, but also the design discipline of Hugh Stubbins, who, because of his confessed admiration for the Scandinavian tradition of Alvar Aalto, also assimilated the best ideas being developed at M.I.T.

Each individual selected below represents some facet of remembered, rather than recorded, history. While their opinions and points of view differ (and many others might, of course, have been brought forward), the interface of these particular actors in the drama provides a new perspective on the history of architectural education in Boston, particularly during its crisis of Modernism.

4.1 HARVARD'S TEACHING OF ARCHITECTURE AND OF THE FINE ARTS, 1928–1985

John Coolidge

John Coolidge, Boardman Professor Emeritus in the Harvard University Department of Fine Arts and long time director of the Fogg Museum was the son of a Harvard professor and attended the college; he then received the Ph.D. in Fine Arts from New York University.

When Americans refer to "the Visual Arts" or simply say "Art" the British write "Art and Architecture." Consider the title of some volumes in the Pelican History

of Art series: *Art and Architecture in Italy, 1600–1750*, *Art and Architecture in France, 1500–1700*; in each case the entire book was the work of a single author.¹⁶ The implication is always slightly pejorative. Architecture is art-like; it is not quite art. Had Dr. Jekyll painted the Sistine Ceiling or carved the marble David, Mr. Hyde would have designed the dome of St. Peter's.

Despite Boston's notorious anglophilia, the teaching of architecture at Harvard during the last sixty years, though rarely wholly American, has never been significantly English. Rather it has been in varying degrees French, German or Spanish. And it has never been taught or considered as less than an art, especially as far as the members of the Department of Fine Arts were concerned. However, over that period, the relation between the various experts involved has varied considerably.

For an undergraduate who knew he wanted to be an architect, Harvard in the early thirties was a chaotic place. Majoring in Fine Arts one had little contact with what was then called the Architectural School. One began with a most popular course: Fine Arts 1d, a one-semester survey of art between Constantine and approximately Cézanne. This was taught by George Harold Edgell. He averaged eight buildings or artists an hour, one painting a minute, categorizing each with a vivid one-liner. Even a freshman sensed superficiality, a concept of which he had never heard.

Edgell, Harvard's first Ph.D. in Fine Arts, was friendly, energetic, ambitious, always in a hurry. The writer of a one-volume *History of Architecture* and author of *The American Architecture of To-day*, he was also dean of the Architectural School, an institution immersed in the Beaux-Arts.¹⁷ One youthful memory is of the stunning display of great white sheets of ragboard, covered with meticulous drawings for the competition "Design a Summer White House," many of them perspectives, beautifully executed in water colors. In my senior year, 1935, Edgell hurried off to become the director of the Museum of Fine Arts in Boston, immediately firing a curator of paintings who had been rash enough to acquire a Matisse.

Two Contrasting Images

Above all, the memory of Lincoln Kirstein, Alfred Barr, Philip Johnson, Russell Hitchcock, John McAndrew and their friends is still green. As undergraduates, five years or so earlier, they had started their own little magazine, *The Hound and Horn*, and, sponsored by Paul Sachs, the associate director of the Fogg Museum, had founded the New England Society for Contemporary Art. These actions were the beginnings of their collective lifetime achievement—to pick up the torch lit by the Armory Show of 1913 and to introduce younger Americans to the arts of the early twentieth century and of our own time. *The Hound and Horn* ceased publication shortly after its founders graduated and went their separate ways. The New England Society, however, continued under the leadership of Perry Rathbone and Otto Witman, only to be extinguished by the withering of private support after Franklin D. Roosevelt closed the banks in 1932. Of the vision of these young men or of their activities, the School of Architecture seemed wholly unaware.

Secondly, there were the senior art historians and among them the withdrawn, almost saintly Kingsley Porter. He had abandoned medieval architec-

ture, about which he had written a solid two-volume work at the age of twenty-three. He still taught Romanesque sculpture, and was pioneering the scholarly study of Irish Art of the Dark Ages. He encouraged undergraduates taking his courses to write their term papers at his house, "Elmwood," using his superlative collection of photographs, periodicals and books which, with the students' reading room, occupied the entire third floor. As the most admired scholar of the older generation he had taught some of the undergraduates mentioned above. Indeed, Russell Hitchcock's learned publication on H. H. Richardson is dedicated to the memory of Porter.¹⁸

Porter's pupil Kenneth Conant was prepared to give a thorough course on any period of European or American architecture. Trained as an architect, he had practiced little and became the first historian to achieve permanent tenure at the School of Architecture. Although he was at no point in his career a member of the Department of Fine Arts, from first to last its members sponsored his courses, and he guided occasional graduate students to a Ph.D. in Fine Arts. His teaching was based on profound relationships with an astonishing variety of great monuments; his scholarly focus was the excavation and publication of the monastery of Cluny. Such was his devotion that he would welcome even an untrained freshman like myself as a summer volunteer in that endeavor.

Once a pupil of Conant's, one was always his friend. He thought nothing of making a superb drawing of Michelangelo's design for the facade of Saint Peter's for a former undergraduate to publish while a graduate student at another institution. Such former undergraduates often gathered in Cambridge during the summer to work either in the Harvard Summer School or on their own. In 1939 and again in 1940 the number was significant, and they took field trips together and occasionally met informally. After a group dinner in August of the latter year one of them, Turpin Bannister, proposed the formation of the Society of Architectural Historians. Kenneth and the other six present agreed; each subscribed a dollar for postage so Bannister could canvas American architectural historians elsewhere, and the new professional organization was on its way.

College involved no worries as to my immediate future. There was only one architectural school to attend: Columbia. Joseph Hudnut, its recently appointed dean, was a vigorous proponent of the International Style. He was determined to create a School that was a worthy counterpart to the Museum of Modern Art. It was indeed a shock to learn in April of my senior year that he was to succeed Edgell as the dean at Harvard. Still, as the son of a professor, all my twenty-one years had been spent near or at Harvard, so I went to Columbia anyway. There I quickly learned that I was no architect and had better try architectural history, and so I enrolled at the Institute of Fine Arts, New York University.

It was not until the autumn of 1947 that I returned to teach in the Department of Fine Arts as an assistant professor. By then, the Graduate School of Design, as Hudnut had renamed the Architectural School, was a national force. His first major action had been to call upon Walter Gropius to take charge of the teaching of architecture. Gropius had assumed this post in 1937. Sadly, the two men then had a falling out. They disagreed fundamentally, I was told, because Hudnut believed profoundly that the students should be familiar with the entire western tradition of major architecture. Gropius, by contrast, was said

to be hostile to the teaching of history; an opinion he flatly denied. He claimed a broader interest, including vernacular architecture and the achievement of societies outside the high tradition of the West. The result was that the core of the School was dominated by Gropius and a group of sympathetic instructors.

Outside this core were various somewhat isolated enterprises. Conant, for example, continued teaching the history of architecture to a substantial number of students, some from the School of Design, some from the Department of Fine Arts. He had little sympathy with the point of view of Gropius and his coterie. His position grew increasingly isolated as the outlook of the Department gradually shifted away from his comprehensive interest in all high architecture within the western tradition. Under the influence of the refugee German art historians and their American pupils, members of the Department tended to confine their professional activity to single major periods. Within these, architecture was viewed as part of a total historical and social context. Especially in their undergraduate courses, professors expected to lecture on all the arts of a given period. Conant's personal friendships remained vivid, but professionally his later years were lonely.

Another eccentric enterprise was Hudnut's course in the history of cities. I came to know his ironic humor, his breadth of sensitivity, and the clarity and elegance with which he expressed his ideas, through conversation and by reading the essays he had written. He quickly became a good friend, and honored me indeed by asking me to participate in teaching his cities course. To my great regret I was unable to accept, for Harvard University asked me to become director of the Fogg Museum in 1948. It was a challenge I could not refuse, and I had to abandon teaching the history of architecture for two decades.

Gropius taught architectural design at Harvard for some thirteen years before the University offered him a significant commission. Then he was asked to design the Harkness Center, a cluster of dormitories for graduate students with a central building for meals and recreation.

The project was executed on time and within the budget. However, as work proceeded Gropius came to feel that meeting the tight financial constraints had made the design too austere. He therefore decided to spend some \$50,000 of his untouched contingency fund to commission some works of contemporary art to go in the building. For this he needed permission from the University Corporation.

Before requesting permission he sought faculty support and asked a group of professors in the Department of Fine Arts for their backing. We were unanimous in our enthusiasm, though we suggested that the final sketches by all the artists he commissioned become the property of the Fogg Museum. We highly approved of the artists he had selected but urged that he include one young American. He agreed and added Richard Lippold to the roster. The Corporation did approve. Now some nine generations of Harvard students have benefited from Gropius's vision as an architect and his connoisseurship as a patron. This episode provided my first serious contact with Gropius. Although I never came to know him intimately, he was infallibly courteous and cooperative. For several years it was my turn to teach part of the introductory survey of the History of Art. Gropius kindly agreed to lecture to that course on con-



temporary architecture. Every year, our largest lecture hall was filled to overflowing on that occasion.

Harvard's Busch-Reisinger Museum is the only institution in the country specifically devoted to the study of Germanic art. Professor Charles Kuhn, for some forty years curator of that museum, built up a remarkable collection of German art of the twentieth century. This included a representative group of objects by artists connected with the Bauhaus. Gropius generously contributed to the enlargement of this collection, not only bequeathing to the museum the archives of his work during his years in America, but persuading other artists to do likewise. Thanks to the joint efforts of Kuhn and Gropius the museum's Feininger Archives are also outstanding.

Hudnut's successor as dean, Josep Lluís Sert was organically informal, the most casual-seeming administrator in the six colleges or universities where I have taught. He repeated Gropius's generosity in different terms. In 1964 Ellsworth Kelly presented Harvard with *Red-Blue*, a monumental piece of sculpture. This had been commissioned by the New York World's Fair and returned to the artist after its conclusion. A collector himself, Sert was delighted to place Kelly's statue on a building of Peabody Terrace (1963), a series of apartment houses for married graduate students which the dean had just completed for the University. Sert lived for many years in exile, but was delighted to return to

Graduate Center (Walter Gropius, 1949–1953) with the *World Tree* (Richard Lippold, sculptor, 1953), Harvard University, Cambridge. Gropius's teaching was theory, rather than building, until 1949 when he received the commission for the Graduate School which was constructed north of the Law School. It introduced Modernism and the Bauhaus style (amidst a furor of reactions) to the Harvard campus.

Spain for substantial periods of time during his later years. On those occasions he lent the works of art in his and his wife Moncha's collection to the Fogg Museum. At his death the most important part of this collection was willed to Harvard University.

Although professionally trained, Sert had comparatively little practice as an architect before coming to Harvard. Perhaps his most influential building had been the Spanish Pavilion in the Paris World's Fair of 1937. His initial practice had been largely in city planning. During his tenure as dean that branch of the School of Design was both notably strengthened but also broadened to include the study of the social environment of cities.

Meanwhile a third "Department of Art" appeared at Harvard. The practice of art had been taught erratically at the University from the beginning of the nineteenth century, and regularly since the early 1870's as part of the Department of Fine Arts. Indeed, when the classroom building Sever Hall was commissioned in 1878, Richardson provided a gallery on the second floor where works of art executed by undergraduates could be displayed. Respond-

(Design Research Building, Cambridge, Benjamin Thompson, 1962)
In the 1960s Thompson established an architectural furnishing and furniture center as Ralph Rapson had done in the 1940s. Thompson's work carries the style of Gropius and I.A.C., with whom he was initially affiliated, into another, less limited generation.





ing to a major fund-raising campaign, Alfred St. Vrain Carpenter and his wife Helene Bundy Carpenter contributed money for a building to house a Department of Visual and Environmental Studies. The 1963 building was designed by Le Corbusier, his only structure in America. Visual Studies meant the practice of the visual arts, an activity which the Department of Fine Arts willingly surrendered. Environmental Studies included a series of undergraduate courses on the history of architecture sponsored jointly with the Department of Fine Arts and the Graduate School of Design. On Conant's retirement, his place on their faculty was assumed by Edouard Sekler, an architect trained in Vienna but who, sponsored by Sir John Summerson, had later received a Ph.D. in the History of Architecture from the University of London.

Sekler, a full generation younger than Conant, was deeply involved with the faculties both of the Department of Visual and Environmental Studies and of the School of Design. He was likewise completely at home in the Department of Fine Arts, which sponsored his courses in the history of architecture. He also guided some art historians toward a Ph.D. Most remarkably, he was universally liked and admired. He was thoroughly and effectively interdisciplinary in a personal way, the way Harvard most admires but rarely achieves.

Flansburgh House, Lincoln, Massachusetts (Earle Flansburgh, 1964). The ideas of Modernism, illustrated in the work of Gropius and Josep Lluís Sert's patio house in Cambridge, did not begin to penetrate the New England domestic idiom until the 1960s. The Flansburgh House is one of the earliest and most publicized results.

4.2 ROBERT C. DEAN AND THE AMERICAN COLONIAL IMAGE

Margaret Henderson Floyd

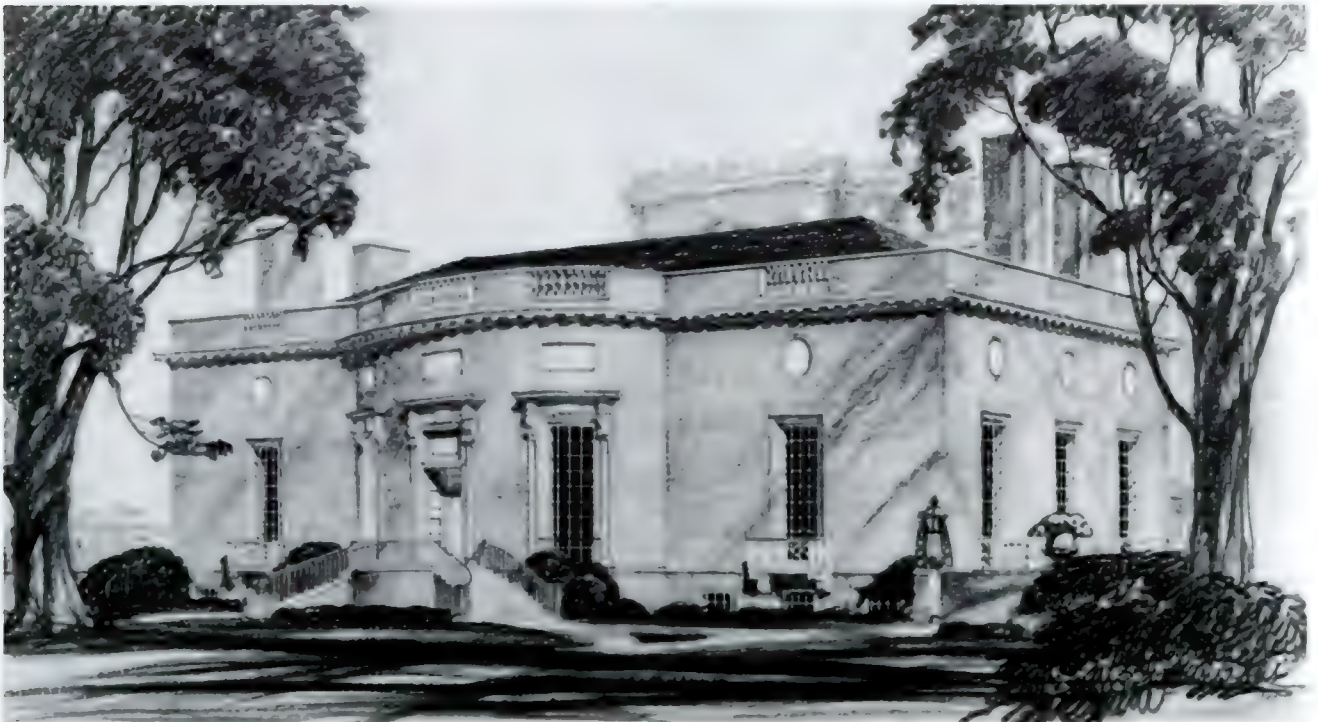
Born in Memphis, Tennessee, Robert C. Dean came to M.I.T. for the B. Arch. degree in 1922. He won a fellowship for undergraduate study at Jacques Carlu's School at Fontainebleau in France, the Chandler and Beaux-Arts Prizes for drawing, graduating with the M.Arch. and the M.I.T. Travelling Fellowship in 1927. Dean taught design at M.I.T. 1930–1941 in practice with Perry, Shaw & Hepburn during the rebuilding of Colonial Williamsburg, Virginia, becoming a partner in 1940.

"This building sets modern architecture back twenty-five years." —Walter Gropius, Regular Meeting, Boston Society of Architects, c. 1951

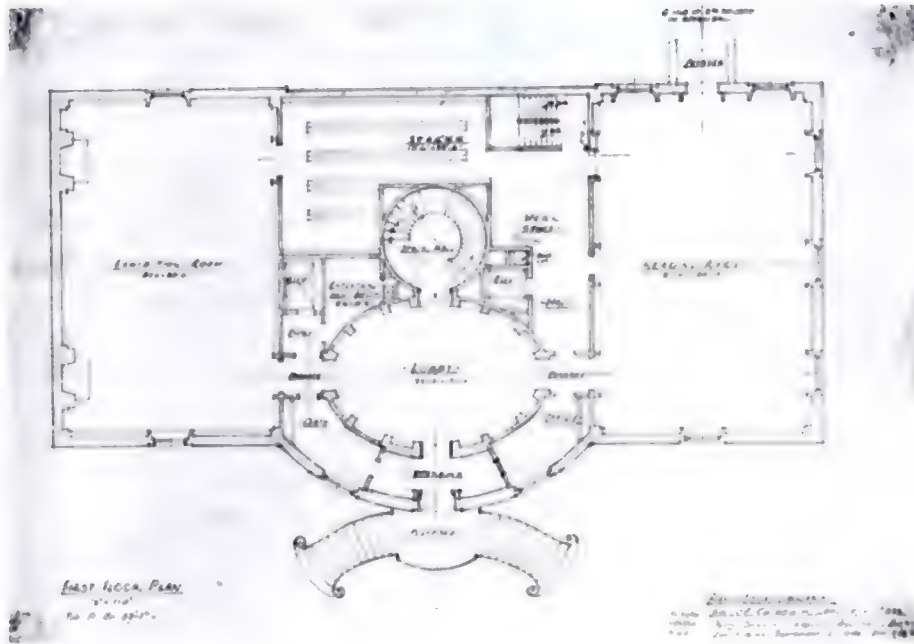
"I was president of the Boston Society of Architects and presenting our firm's latest work, the new Jordan Marsh Department Store, when Gropius called out [the remark cited above] from the back of the audience. Then Walter Bogner stood up and accused me of being dishonest. Well now, I always thought that dishonesty meant stealing from widows and orphans, so I asked him what that had to do with competence in designing a building."¹⁹ Although Gropius's comment was derogatory, Dean may well have understood its genesis; but the peppery Southerner was not going to be called dishonest by anyone, let alone Bogner.²⁰

Besides, I am not against Modernism; I started out as a Modern architect myself and went all over Europe in the late 1920s visiting Modern buildings when I was there on the Wheelwright Fellowship from M.I.T., but then I went to work with Perry, Shaw & Hepburn during the Depression. They had started the project at Colonial Williamsburg in 1927 and I began to get pretty interested in the work. Although I came in toward the end, I was able to research and design a good deal of the ironwork. I also got to do all the drawings for Houghton Library at Harvard; and in our office everyone could draw.

Houghton Library, Harvard University, Cambridge (Perry, Shaw, Hepburn & Dean, 1941). Drawing by Robert C. Dean. The archaeological experience of the Williamsburg project and its national popularity aligned the image of Boston architecture closely with the Colonial Revival as Modernism began to appear elsewhere after the depression.



Houghton Library: first-floor plan. Drawing by Robert C. Dean (1941). The lobby and staircase area of Houghton reflect the competence with which the architect handled such curved forms even as an M.I.T. student.



The outburst of resentment that exploded from the normally courteous German during Dean's presentation must have been born of deep frustration, because everything Dean did so competently threatened Gropius's vision for the Modern movement.²¹

In 1935, the year before Gropius came to Harvard, the entire December issue of the *Architectural Record* had been devoted to the work of Perry, Shaw & Hepburn at Williamsburg, an undertaking that had been funded by John D. Rockefeller, Jr. beginning in 1928, and that continued through the depth of the Depression.²² The Williamsburg endeavor, involving both William Graves Perry and his partners Thomas Mott Shaw and Andrew Hopewell Hepburn, thus received more public attention than would normally have been the case even for a sizable commission, and Williamsburg was an enormous undertaking.²³ Boston's best design talent in landscape architecture was also involved; Arthur Shurcliff re-created the gardens, while Harold Shurtleff undertook general research on the entire project. This experience prepared them well to provide reconstructed views of Harvard College for its tercentennial publication in 1936.²⁴ Conditions were just right in America to ensure the triumph of Williamsburg; its proud patriotic consciousness countered the national air of uncertainty about economic conditions and the impending war. And then, a religious and moral overtone had been provided by William C. Goodwin, rector of the Bruton Parish Church, who sold Mr. Rockefeller on the project. With such professional credentials, Robert Dean was certainly caught off guard by Bognner, if not by Gropius; for Dean believed what Hugh Stubbins later learned, that there is more than one architectural point of view. Dean commanded a wide range of architectural idioms, which ranged from the Colonial Revival to the Modern style.²⁵

But it was Williamsburg's popularity with the Harvard constituency that ensured the continued supremacy of the Georgian ideals of Charles Coolidge's river houses of the 1920s. Even worse, Dean himself had done the drawings

for Houghton Library, the final, exquisite, Colonial Revival building for Harvard Yard in 1938–1939.²⁶ While Gropius had been rightly heralded as a theoretician and welcomed in America as the beacon light of Modernism, he received disappointingly few commissions in Boston or from Harvard—his own institution—until the 1950s.²⁷ While Gropius's collaborative method and vision for modern architecture were acknowledged, as a practicing architect he was powerless in face of the enthusiastic national network of patronage enjoyed by Perry, Shaw & Hepburn and its delineator, Robert C. Dean. The novelty of Gropius's approach failed to topple the status of Dean's firm or of Coolidge, Shepley, Bulfinch & Abbott at Harvard.²⁸

Herein, of course, may have lain some personal motivation for Gropius's attack. Dean's legendary draughtsmanship led to his employment with Perry, Shaw & Hepburn during the Depression, when draughtsmen were a dime a dozen. The need to market himself as a crack draughtsman was doubtless an inducement for Dean to associate himself with the traditional constituency in the 1930s instead of pursuing Modernism, since there was no Modern architecture being done.²⁹

When Robert C. Dean arrived in 1923 from Memphis, Tennessee in knickers and pork pie hat to enter the architectural program at M.I.T., he was green as grass in the Athens of America.³⁰ Nevertheless, in short order the outspoken, energetic Dean took the lead in the design classes at M.I.T., attracting the attention of Jacques Carlu, the French architect who was head of the design program. In five years Dean posted a continuous series of wins for his draw-

"A Footbridge:" elevation, plan and section. Student drawing by Robert C. Dean (1926). Fourth-year Design Class, M.I.T. Annual Boston Society of Architects Conjunctive Competition First Medal, 1926. The architect's drawings exploited a baroque treatment of light, while the sculptural forms reveal the style of Jacques Carlu, head of design at M.I.T., and Dean's experience at the Fontainebleau School in France.



ings; "A Footbridge" was awarded first prize in the conjunctive competition of the Boston Society of Architects that included all three schools in 1926. His landscape technique was well-developed, his use of line and Baroque lighting adroit, and his elegant figurative sculpture much influenced by the Art Deco style of Carlu, best known for his transatlantic oceanliner interiors and the Ritz Hotel in Boston.³¹ In "A Country Inn, Pueblo Style," winner of a gold medal from the Pan American Congress of Architects in 1928, the brilliant color suggests Carlu's tempera painting of "Rome" (Plate 4), now in the collection of the M.I.T. Museum. In his "Municipal Observatory" (Plate 3), premiated in nationwide competition at the Beaux-Arts Institute in New York in 1927, the extraordinary black wash of the sky silhouettes the finely delineated elevation and plan in a dramatic light. It took little time for Dean to win a fellowship in 1925 to the Fontainebleau School in France, where Carlu taught each summer, and where he was exposed further to the sculpture of Giulio Romano and Primaticcio.³² Upon graduation from M.I.T., Dean envisioned himself as a Modern architect fueled by the Art Deco influence of Carlu and his European experiences. He taught for a year with Harold Bush-Brown at the Georgia Institute of Technology, then returned to Boston to teach at M.I.T., joining Perry, Shaw & Hepburn, for whom he had worked in 1926.

The career of Dean in the early 1930s was extraordinary in that his firm, which welcomed his increasing interest in Williamsburg, allowed him to continue teaching. From the Rogers Building on Boylston Street between 1930 and 1941 a whole generation of young architects, becoming increasingly interested in Modernism, were initiated into design classes by Robert C. Dean. "They had absolutely no interest in my work at Perry, Shaw & Hepburn (which in 1941 became Perry, Hepburn, Shaw & Dean) or in establishing the great models for Colonial Revival architecture," laughs Dean, "they never queried me about my practice." The students absorbed instead Dean's understanding of the principles of design and of draughtsmanship. Those, such as James Lawrence (see Chapter 4.6), I. M. Pei, Gordon Bunshaft and Walter Netsch, who benefitted from this training, went on to command a disciplined sense of design that pervaded their work despite the stylistic schizophrenia of the period.³³

Meanwhile at M.I.T., Alvar Aalto was brought in to teach by Dean MacCornack in 1941, thereby enhancing the Scandinavian component of the M.I.T. program that Lawrence Anderson (who succeeded Carlu in 1934 as head of design) had already introduced. Aalto's curvilinear Baker House, a dormitory with dining room, was commissioned in 1946, a design that undulates on the west shore of the Charles, expressing the confluence of the river and allowing for views of the river throughout its length. The Finnish architect's sense of materials and textures differentiated his brand of International Modernism from that of the German Bauhaus; he was an immediate, popular success in Boston. In the late 1940s after Aalto returned to Finland, Robert C. Dean worked on the cascading rear steps of Baker House. Who was better prepared to follow Aalto's specifications for twisted, antique brick laid up with wide joints than Dean, whose firm had shipped a whole order of brick to Lynn, Massachusetts to be used in the Bus Station when it proved unsatisfactory for Houghton Library? Dean enjoyed working with Bill Wurster and Aalto, though he wished the north elevation had been of glass.³⁴



American Military and Memorial Cemetery, Cambridge, England (Robert C. Dean, 1947–1954). The distilled spirit of this design embodied its architect's hopes for the direction of modern architecture which he believed held opportunity for freedom and creativity in comparison to the Beaux-Arts system in which he had trained.



Dean's commission in 1947 for the American Military Cemetery in Cambridge, England is the design of which he is most proud. The poetry of its distilled, classicism may echo his training with Carlu, but it embodies his own dreams for Modernism as well.³⁵ "I always had such hopes for Modern architecture; it represented freedom and opportunity of style, but somehow it has fallen short of the direction in which it could have developed." Post-Modernism? "The return of these images is caricature, and an architect has no right to build caricature." Dean's own work as a steel sculptor and present buildings

Front elevation, Baker House Dormitory, M.I.T., Cambridge (Alvar Aalto with Perry Shaw, Hepburn & Dean, 1946–1949). Irregular twisted brick with special deep joints gave Aalto's style a texture and character that made it popular in Boston. Robert Dean completed the execution of the rear elevation after Aalto returned to Finland.



by his firm confirm his direction of thought. The Wellesley College Science Center (1978), by his partner Charles F. Rogers, won the Harleston Parker Award of the Boston Society of Architects in 1988. This design was so avant-garde in 1978 that a decade was required for the profession to overtake the pace of the successor firm of the magnificent Williamsburg experiment; Perry, Shaw & Hepburn led the nation in the 1930s from Boston, but like Robert C. Dean, their finest draftsman, the firm looks forward more than back. (Plate 8).

4.3 ROYAL BARRY WILLS: THE AMERICAN "COLONIAL" HOUSE

Margaret Henderson Floyd

Royal Barry Wills, F.A.I.A. (1895–1962) graduated as a marine engineer from M.I.T. in 1918. He worked first as a design engineer for Turner Construction Company before identifying the small house as a means of entering architectural practice. Winning the first regional prize in the National Better Homes competition in 1927, he was presented the award for the Home of the Year by President Hoover in 1932. Wills wrote eight best-selling books. The popular, less prestigious market that he served so well has obscured the significance of his quality as a designer and his position in the history of American architecture.

I am as tired of pseudo manor houses, pseudo castles and temples as anyone. I must, however, accept the traditional house that is truly functional. Unfortunately, the modern house lacks appeal . . . is too much of an engineering approach to a specific problem . . . Its flat surfaces breathe revolt. The past may not be good to copy, but it is accumulated experience and should not be thrown aside. It tells us, for one thing, that all good architecture has been local. It cannot be the same, then, in all parts of the country.³⁶ —Royal Barry Wills, *The House of Tomorrow*, 1939

While Modernism worked slowly into commercial and academic architecture, its infiltration into domestic design was even slower. The work of Royal Barry Wills, one of the most popular architects America ever produced, at first glance would seem to stand in utter contrast to the monumental buildings and theoretical concerns of his peers. His small house brought the practice of design down to a human scale just at the time when architecture began to move in a mechanistic direction, producing structures that "felt no obligation to . . . acknowledge their . . . context," as Robert Sturgis writes in Chapter 5.2. Yet it is precisely on this issue that Wills's work establishes a link between the genius of Richardson and Olmsted, and rising concerns about urban design in the 1960s and regionalism today. The Wills small house holds a more important position in the mainstream of the American landscape tradition than has heretofore been realized. Designing in context of site was not a consideration in the 1950s for the Modern movement, and was revived as a valid concern only after disenchantment with the New Brutalism, a quarter century later. But Wills's continued presence in the public mind demonstrates that the more humanistic approach and reverence for traditional materials, though theoretically unfashionable at mid-century, never fell from grace.

Of modest means, Wills entered M.I.T.'s marine architecture program with

"Entrance to an Observatory," (Royal Barry Wills, 1916). Beaux-Arts studio training was available to students in marine architecture. This polished work gives no hint of Wills's future success in small house design.

the class of 1918, graduating after a stint in the Navy during World War I. At M.I.T., drawings such as "Entrance to an Observatory" honed his already fine draughtsmanship into the Beaux-Arts mode, but prepared him for his practice less directly than his expertise as a freehand draughtsman and caricaturist, a talent unexcelled in his generation. "No one can accuse me of picking easy jobs as summer employment during M.I.T. days," wrote Wills, "they definitely called for muscle and they weren't very lucrative, but each had to do with building."⁴⁷ During Wills's years at M.I.T., Colonial Revival architecture (that was not a part of the curriculum) was growing in popularity, but on a broad vernacular level resembled its models in only the most haphazard way, for primarily builders (rather than architects) were producing the designs. Even Wills's strongest critics allow that by mid-century he had done more for the quality of the small home in America than any other architect.⁴⁸ Educationally, he put into practice engineering and drawing skills acquired through on-the-job apprenticeship experience, rather than through M.I.T.'s formal training.

The yearbooks of the Boston Architectural Club during this period provide



an unmistakable picture of the process by which photographs and measured drawings of colonial buildings, particularly from New England, began to be the staple of design for the architect.³⁹ Not only were colonial elements reproduced in new construction at whim, but fragments were reassembled from original colonial work as well.⁴⁰ This period preceded Perry, Shaw & Hepburn's constructions at Williamsburg that initiated an accurate, archaeological approach to monumental Colonial Revival structures; no architect had yet addressed the small house as a serious design challenge.

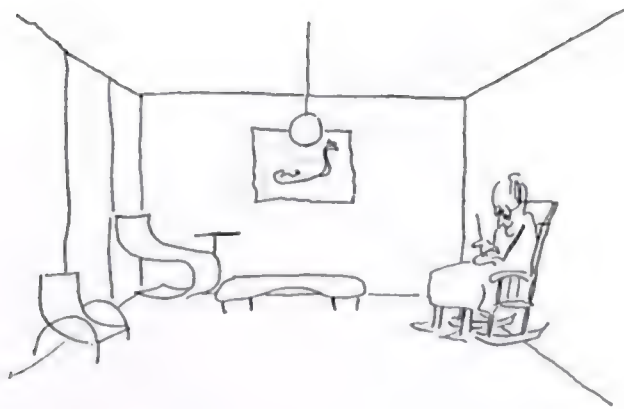
An imaginative businessman, Wills hit upon the idea of selling sketches of well-proportioned, small New England houses to the newspaper; by 1925, when he gave up his engineering job at Turner Construction Company, his off-the-record practice had taken off on one of the most extraordinary professional trajectories in the history of American architecture. As an engineer fully conversant with structure, Royal Barry Wills brought specific skills and new attitudes to practice; his understanding of the rationale underlying the morphology of the colonial house was unrivalled, and this he translated for the masses.⁴¹

Boston clients were soon purchasing through the news papers plans of small houses designed by Wills; his practice expanded even during the Depression as a sort of latter-day extension of Gustav Stickley's *Craftsman Houses* of 1901. His career was played out on the pages of the shelter magazines and in their award competitions; these became increasingly important in the 1930s when comparatively little other building occurred. Without personal resources, Wills was forced to face architecture as a business, with a small profit in each commission. While most of his colleagues served corporate, civic, and wealthy private clients, Wills was the first architect to aim at upgrading the quality of the small house market that had previously been served mainly by hacks. The departure of servants to wartime activities in the 1940s introduced different programmatic requirements for the single family house as well. Builders and developers soon advertised his designs widely; single-handed, he developed a new standard of design quality for the middle class in the East. Wills's engineering approach to the incremental growth pattern and structure of the small colonial house brought the form to the heart of America. He was able to reduce costs, to standardize parts, to design additively in order to serve the masses, rather than the custom market; in short, he executed in the real world the theoretical and social objectives of the Bauhaus, but in a traditional architectural language.⁴² His understanding of the colonial house was as deep and intellectual as Ralph Adams Cram's understanding of Medieval and Gothic forms.⁴³

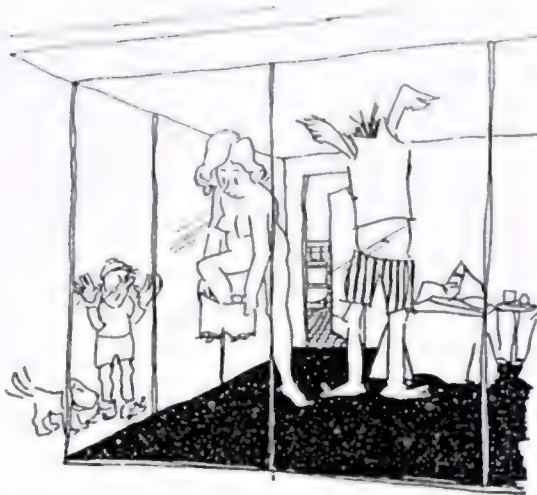
Wills's cartoons, circulated primarily to his clients, were also published in his five books that pervaded and set the standard for the market. *Living on the Level* (1955), *Houses Have Funny Bones* (1951), and his other books enabled him to laugh at himself, the practice of architecture and its condition. The dichotomy between the Bauhaus chair and the New England rocker was trenchantly depicted by Wills in economical pen and ink. In the heyday of Robert Frost and Norman Rockwell, Wills spotlights the divergence of the Bauhaus mission from the client. While his "Kathy Ryan's Colonial Primer" illuminates the shape, proportions, evolution and suitability of the New England house to the climate, another cartoon demonstrates why clients who choose Miesian

Architect's House, Winchester (Royal Barry Wills). While Colonial Williamsburg provided the national image for civic architecture in the 1930s, the small house of Royal Barry Wills initiated one of the most successful regional forms of architectural expression in the twentieth century. Old boards and elements from earlier houses were often incorporated into Wills's new construction.





Cartoons of Clients. Drawings by Royal Barry Wills, c. 1950. The innate resistance of northern New England conditions made Modernism less functional than the traditional house in Boston. Wills's eight books were best sellers.



glass walls over the chimney and hearth in the driven snow of New England are rare and perhaps of questionable pragmatic judgement.⁴⁴

As the 1930s and 1940s recede into memory, Wills's son Richard recalls entering the Boston Architectural Center after graduation from Tufts University in the early 1950s, caught between his father's achievement and his own generation as Modernism began to unfold. His dilemma is a poignant comment on the history of architectural education; to whom should the architect speak?⁴⁵ As urban renewal invaded Boston in the 1960s, Wills wrote just before his death:

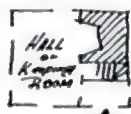
Bring on your helmeted hearties with their sledges, the great jaws that chew up bricks, the steel ball to demolish concrete, the dozers and the trucks; the dust of a century or two is but waiting to rise and settle on a desert. But not for long you say, because a splendid new city of steel and chrome and glass, of plazas and fountains and the sheen of youth will be erected. Maybe, but it won't have no heart brother, and it won't have no soul. Who knows but that it may be manted with the unhallowed similitude of a prairie metropolis ten years after they struck oil, or be invested with the tiresome, look-alike clichés of Chicago, Cleveland or Columbus.⁴⁶

The most famous skirmish between Wills and the forces of Modernism was the *Life Magazine* competition of 1939: eight prominent architects were commissioned to design houses for four families—one Modern and one traditional for each. Pitted against Frank Lloyd Wright's Usonian House, Royal Barry Wills reported "I won, hands down. It was no contest; the family in Minnesota built my house."⁴⁷ Modernism took root in the Mid- and Far West, yet a half-century later, as Post-Modernism overtakes southern New Hampshire, it seems that the indigenous New England tradition was recreated and demonstrated more forcibly to the American mind and the world by Wills's practice, than by any other. If architecture is a valid expression of regionalism, Royal Barry Wills was New England's finest spokesman.⁴⁸ (Plate 7)

House Types. Drawings by Royal Barry Wills (1940–1960). Although Wills's designs were modest in scale, his structural and aesthetic understanding of seventeenth- and eighteenth-century construction was as sophisticated as that of Ralph Adams Cram of Gothic forms. It allowed him to develop standard additive systems of design to serve a mass market, while maintaining quality of form and shape.

DEVELOPMENT OF THE COLONIAL HOUSE

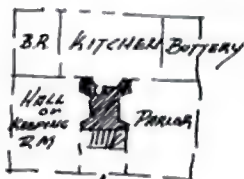
STAGE #1
ONE ROOM PLAN
1690



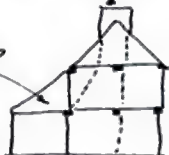
STAGE #2
TWO ROOM PLAN



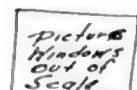
STAGE #3
THIR ROOM PLAN WITH LEANTO ADDED



ADDED LEANTO



COMMON MISTAKES 'COLONIAL' IN HOUSES as built today



Windows often too fat & short on bad shape panes

Pictures Windows out of Scale

4.4. "GOING MODERN:" BOSTON IN 1930

Isidor Richmond

Isidor Richmond (1894–1988) of Richmond & Goldberg, studied architecture at M.I.T., in 1923 winning the Rotch Travelling Fellowship. He was an instructor in the 1920s at M.I.T., a member of the American Institute of Architects and vice president of the Boston Architectural Club in 1930. The following material is drawn from a publication for the American Institute of Architects Committee on Public Information in the B.A.C. Archives.

The millennium has been reached! The Age of Wonders is here! Good old staid Colonial Boston is "Going Modern." Our conservative Bostonian who likes to think of his city as the quaint old Colonial town, with crooked, charming streets, may hold up his hands in holy horror and say: "It cannot be!" He need only look about him, however, wherever buildings have been recently constructed, where construction is underway, or look at the architect's sketches of buildings about to be erected, to realize that it not only can be but is.

The predominant general character of Boston, it must be admitted, is still, and proudly so, that of a quaint old Colonial town. It should be remembered, however, that we are celebrating the tercentenary this summer. Boston's present character is the result of three centuries of solid, slow, steady growth.

The Old World Character

Buildings like Faneuil Hall, the Old State House, the State House on Beacon Hill, the Old North Church and Old South Meetinghouse, the Park Street Church and the old houses on Beacon Hill are the buildings that give Boston its Old World character. Added later but not injuring this atmosphere were more recent gems as Richardson's fine Trinity Church in Copley Square and McKim, Mead & White's incomparable Public Library (even though these last two are not Colonial style architecture).

The character of Boston is changing. One needs only to stand on Boston Common and look about. Towards the harbor can now be seen breaking into the skyline the new twenty-four-story United Shoe Machinery Building, by Parker, Thomas & Rice, with Henry Bailey Alden as associate architect; and the 75 Federal Street Building of twenty-one stories, by Thomas M. James Company, architect. Both of these are of terraced, setback design. Close to the Common, on Tremont Street, steadily climbing and soon to break into the skyline (electrically welded to avoid noise during construction), stands the steel frame of the Edison Building by Bigelow, Wadsworth, Hubbard & Smith, also designed in the Modern manner. Turning about and looking over the Public Garden, one now sees the thoroughly Modern silhouette of 6 Arlington Street, a cooperative apartment building now nearing completion, three floors of which will be occupied by the Junior League, for which Strickland, Blodget & Law are architects.

The New Shopping District

All along Boylston and Newbury Streets, Boston's new shopping district, the smart shops and stores are becoming more and more Modern in architecture, while those shops which are not changing their architectural cloaks attempt to get a Modern flavor by the arrangement of their shop windows.

"Salamanca Cathedral." Rotch Travelling sketch by Isidor Richmond (1923). The European drawings of Richmond were reproduced in the Yearbook of the Boston Architectural Club. His comments on Modernism in the 1930s concern "Art Deco" design, rather than the later International Style of the Bauhaus.

The changing architectural character of this new shopping district is evidenced on Boylston Street by the recently completed Lamson & Hubbard Building, by the writer, and the Shreve, Crump & Lowe jewellers shop, which was designed by William T. Aldrich much in the manner of the Modern Parisian shops. Along Newbury Street a number of banks, small office buildings and shops were all designed in the most approved Modern style. Among these are the Rolls-Royce Building by Blackall & Elwell and the charming little black and silver Fitch-Bryant jewelry store by Clifford Albright.

Back in Park Square a building of the most utilitarian character and of unmistakably Modern architecture was awarded the Harleston Parker Medal by the Boston Society of Architects two years ago, having been judged to be the best building of that year. This is the Motor Mart Garage, for which Ralph Harrington Doane was the architect and J. F. Krokyn, associate architect.

Dotted here and there all over the city are other recent buildings which testify to the new trend. Some of these are the North Station group, including the terminal, Boston Garden and the Manger Hotel by Funk & Wilcox, the Public Service Building by Harold Field Kellogg and the new Telephone Building in





Motor Mart Garage, Boston (Ralph Harrington Doane, 1927). New types of construction came slowly in Boston, but the consistent high quality of this architect's designs later brought him the commission for the Episcopal Cathedral in the Philippines that was destroyed in World War II.



Batterymarch Building, formerly Public Services Building, Boston (Harold Field Kellogg, 1928). The gold leaf and multicolored terra cotta and brick of this setback skyscraper was unique in Boston, establishing a standard for high-rise design. Kellogg soon left for California.

Bowdoin Square now under construction, for which Densmore, LeClear & Robbins are architects. Indeed, it is rather difficult to find new construction in the city proper which is not in the Modern style.

How To Distinguish

What are the chief differences between this new "Modern" architecture and that which went before? In order to properly answer this question let us distinguish between the two periods by calling "B.M." (before Modern) and "A.M." (after Modern).

In the period B.M. when an architect commenced upon the design of a building, one early consideration was, "What style shall I use?" And his mind immediately reverted to the traditional historic styles which as a student, either from books or by foreign travel, he had studied. The building was likely to be Greek, Roman, Gothic, Renaissance, Georgian, etc.

In the period A.M. the architect simply tries to solve the particular problem before him in the most direct and logical manner, considering, as well as the usual planning problem, the construction and the building methods of today, and particularly the building materials of today—steel, concrete, glass, etc. It is illuminating to quote from a recent report of the directors of the American Institute of Architects relative to Modern architecture: "If we are not Modern, what are we? And, if we assume to practice an art which should satisfy the needs of our contemporaries (our fellow Moderns), how can we fail to welcome its continuous refreshment?"

Must Widen Horizons

... While this trend towards Modern architecture is undeniably taking place in the business section of Boston, a great number of buildings are being built in the outlying parts of the city which are following traditional lines. Residences, churches and college buildings are being designed in the Colonial, Tudor-Gothic and Gothic styles, but a distinctly Modern note is creeping into a great number of these buildings.

In strong contrast to the Modern trend is the architecture of the buildings now being built for Harvard University, for which Coolidge, Shepley, Bulfinch & Abbott are the architects; and the Boston College designs by Maginnis & Walsh. Both Harvard and Boston College seem to be determined to adhere to their original styles regardless of the trend of architecture outside their walls.

Harvard and B.C. Stick to Old

A stroll along the banks of the Charles in Cambridge reveals many Harvard buildings in progress or recently built in Harvard's usual Georgian style, while looking over the trees from the Brookline reservoir, the stately and beautiful Gothic towers and roofs of Boston College show that she also refuses to be influenced by the trend to Modernism in architecture.

There are, of course, many conservatives who deplore the trend away from the traditional historical architecture and who see beauty only in repetition of the old forms. Raymond Hood of New York referred to such critics of Modernism while speaking before the Department of Architecture of the Massa-

chusetts Institute of Technology at its graduation dinner. Mr. Hood, who is internationally known as the winner, with John Mead Howells, of the competition a few years back for the Chicago Tribune Building, told a story about meeting an American in the Pitti Palace in Florence last year.

"He was looking around, quite overcome with the gorgeousness of the Renaissance period and said to me that he would have given anything if he could have lived in the golden era of the Medicis, when this great work was being done and the world was, figuratively speaking, afire! I could not refrain from remarking to him that it was curious that he should have come from New York, where to use a commonplace comparison, a three-ring circus was going on beside which Florence of the Medicis was a sideshow; that he should have come over on a great liner, more marvelous mechanically and in every other way than the whole Pitti Palace and one that traveled across the seas at the rate of thirty miles an hour—and still should wish that he was back in the "golden" days of Florence! That instead, he should thank God that he was alive in the midst of the golden days of 1930, and in New York, in the very center of everything!" (Plate 6)

It cannot be doubted that changes of great importance are taking place in the art and architecture of America, and Boston cannot but be affected. We are perhaps at present too close to these changes to properly appraise them and judge of their worth. The perspective of time is necessary. Boston most assuredly is slowly but surely losing its old world character, and it must make all who love Boston for its intimacy and its quaintness sad to see this change to Modernism taking place, but we have every reason to hope and expect that in exchange we will get something that is even finer and better.

4.5 CHANGING PERSPECTIVES: BEAUX-ARTS TO MODERN

James Lawrence

James Lawrence, F.A.I.A. graduated from Harvard College in 1929, subsequently attending M.I.T. School of Architecture. In 1959, as president of the Boston Society of Architects, Lawrence persuaded the City Council and the mayor to set up a nationwide competition for the design of the new Boston City Hall, the first national competition for a major building in sixty years. While serving as the New England member on the national board of the American Institute of Architects, he also represented the Institute on the Executive Committee of the International Institute of Architects. Apart from the war when he was overseas for three and a half years, he was in practice in Boston from 1936 to 1978, chiefly interested in educational and other institutional types of buildings.

My own entry into architecture was a delayed one. Graduating from Harvard in 1929, I spent another year of study in Cambridge, England; then to banking for two more years before I awoke to what I most wanted to do. And so, consequently, it was not until 1932 that I finally walked up the steps of the Rogers Building on Boylston Street to enroll as a student in M.I.T.'s School of Architecture.

What did I find? The system of architectural instruction then in force required five years to complete. As M.I.T. was not a graduate school, a considerable

portion of the curriculum was devoted to typical Liberal Arts courses, but as I already had these under my belt, I was able to concentrate my time on the purely architectural side, and so shortened the five years to three.

Instruction in Design, the core of the curriculum, was still closely modeled on the Beaux-Arts system in vogue in Paris at the end of the nineteenth century. In this system, the students were grouped in studios under the tutelage of a "patron architect" who, as their critic, would guide them through problems of various complexity. On completion, they would be brought by the students to an exhibit hall where they would be judged by a jury. M.I.T.'s version of this program varied chiefly in that there was no dispersion of students. Otherwise, it was very similar. All problems began with what was called a sketch problem, which required the student to produce, with no assistance from any source, and within a strictly limited time space of anything from four to twelve hours, plans, elevations, sections and sometimes perspectives, all to be set down with as much precision and style as the student could muster under high pressure. It was a challenging operation, intended to sharpen a student's skills and strengthen his power of decision and—I will attest—it did!

Our drawings would subsequently be hung in an exhibit hall, judged and graded, and each student's work briefly analyzed by a member of the faculty, with all students attending.

Following the judgement, the student would proceed—over the course of anything up to six weeks—to develop his solution in very considerable detail. A wise rule governing this phase of the problem was that students could study each other's solution, and do any amount of research in the library, but in the end, at the final judgement by jury, their finished work had to adhere to the main characteristics of their original sketch problems, or their work would be marked "H.C.—*Hors de Concours*—eliminated from the competition"—a sad ending.

While the sketch problems were generally judged by a single member of the faculty, the final problems for the upper classes were always by jury, several members of which would often be practicing architects.

In later years I was invited on several occasions to serve on juries at the Harvard School of Design, when the Bauhaus philosophy was in force, and it was because of these experiences that I became aware of what I saw as one of the great strengths of the Beaux-Arts system. For under the latter, all students tackled the identical problem, so that a study of the final results was immensely interesting, stimulating and productive.

In comparison, the judging of students' work at Harvard under Gropius's regime was a different affair. In the first place, the students, on the occasions at which I was present, were working in teams—each to his own program, so that any comparison with the work of others was of no value. Moreover, instead of studying the projects in a quiet atmosphere with only members of the jury present, one found oneself constantly surrounded by students, so that it was impossible to speak frankly with one's colleagues—a frustrating ordeal. My friends who studied under this system may have kinder words to say of this matter, but to me it was a flawed approach to the teaching of design.

Speaking further of what differentiated the Beaux-Arts philosophy from that of Bauhaus, I would mention the role that the history of architecture played in

our education. Under the former regime, it meant much, under the latter, little or nothing.

At the time I am speaking of at M.I.T., we were no longer so "classical" as to be required to draw "The Orders," but much stress was still laid on knowing the past, for as Geoffrey Scott put it in his memorable essay on Baroque architecture, "Those things that have once greatly pleased are apt to please again."⁴⁹ I have found this to be true, and while architects worth their salt never slavishly copy the work of others or of other times, a knowledge of the best of all ages cannot help but enrich the quality of their work. It was this lack of knowledge of history, indeed contempt for it, that, coupled with the belief that reason rules all, was responsible, I believe, for the aridity one feels in so much Bauhaus work.

Having said this, I must add that I am not blind to the defects of the Beaux-Arts system under which I studied. We were long on theory, but short on the practical end of things which, at the outset, made us less valuable to our employers.

Reflecting on this period in the history of architectural education, mention should be made of those architects, American and foreign, to whom we turned for inspiration in the development of our work.

The architect who comes most immediately to mind is Frank Lloyd Wright. He was of the very first importance for his buildings, for his writing and his drawings, but also for his directing our attention to the beauty of Japanese domestic architecture and landscape, whose influence was so marked in his own work. It is sad to remember that his great influence was soon to be overwhelmed by the advent of the International Style—epitomized in the person of

Fire Station, Dedham (James Lawrence, 1950). While a student at M.I.T. in the early 1930s, the architect was much influenced by Modern Swedish design, in particular the Town Hall in Stockholm. He also was prime mover in organizing the great Boston City Hall competition in the 1950s, the first in America in decades.

The modern greenhouses attached to the Gardner Museum in the late 1960s nestled against the Venetian walls of "Fenway Court." Functional construction in wood and plastic resisted the vandalism that was rampant in the 1960s, while preserving both beauty and simplicity.





Walter Gropius. There was no love lost between them. They were two bulls on the same pasture!

If firms of that era stand out, they are those of Harvey Wiley Corbett, Raymond Hood and Wallace K. Harrison, whose Rockefeller Center of 1929 was, with justice, enormously admired. I thought it great then, I think it greater now, for it is surely the most distinguished urban complex of the modern world.⁵⁰

Looking abroad, the Netherlands were much to the fore in the twenties with J. J. P. Oud's crisp designs in urban housing at Hoek van Holland and Rotterdam and Willem Dudok's striking City Hall at Hilversum. But by the thirties there was one country that ranked above all others in our eyes, and that was Sweden, which had astonished the world by its 1930 exhibition, a revolutionary event in the world of the arts. With respect to their architecture, it was during this period in Sweden that the International Style burst upon the world, and nowhere else was it to have such full and fair expression. A great part of its success lay in the care with which the Swedes always related the buildings to the environment, but the great credit is due to the elegance and deftness with which Swedish architects handled their works.

As students we were peripherally aware of this exciting development, but not as yet strongly affected by it in our own work. I, personally, was more influenced by the great public buildings of the late twenties, dubbed the Classical intermezzo—notably the famous Town Hall by Ragnar Östberg (1909–1923), the Concert Hall (1920–1926) and the Högalid Church (1916–1923) by Ivar Tengbom in Stockholm. These buildings possessed a richer imagination and a national identity that lay quite outside the capabilities of the International Style; a fact that became more apparent with the passing of time.

Still thinking of Sweden and her artists, I must mention Carl Milles, the renowned sculptor, whose person and work so appealed to us all. His bronze "Orpheus" set into the broad flights of steps of Tengbom's Concert Hall was fervently admired as a splendid example of the successful synthesis of the two arts.

In closing, tribute must be paid to a few men at M.I.T. who meant much to me. I remember with particular gratitude two of my critics, Robert C. Dean, then already in practice and later to become a prominent figure in the Boston architectural scene, and Lawrence Anderson, a talented teacher and gifted architect who, besides guiding his own firm, later filled the role of dean of the Architectural School at M.I.T. with great distinction. Their patience and encouragement have never been forgotten—nor has the kindness, courtesy and understanding of Dean William Emerson, the greatest of gentlemen and a friend to us all.

Such are the memories of architectural education in the early thirties—for me a period of great personal happiness—but for the profession, from the vantage point of the eighties, a period of deep uncertainty. The air was heavy, and a cleansing was needed, but when it came in the form of the International Style, stripping away what was false and irrelevant, it also limited too severely the role of the imagination in design, resulting in an impoverishment of our architecture—from which we are still reacting today, not always successfully.

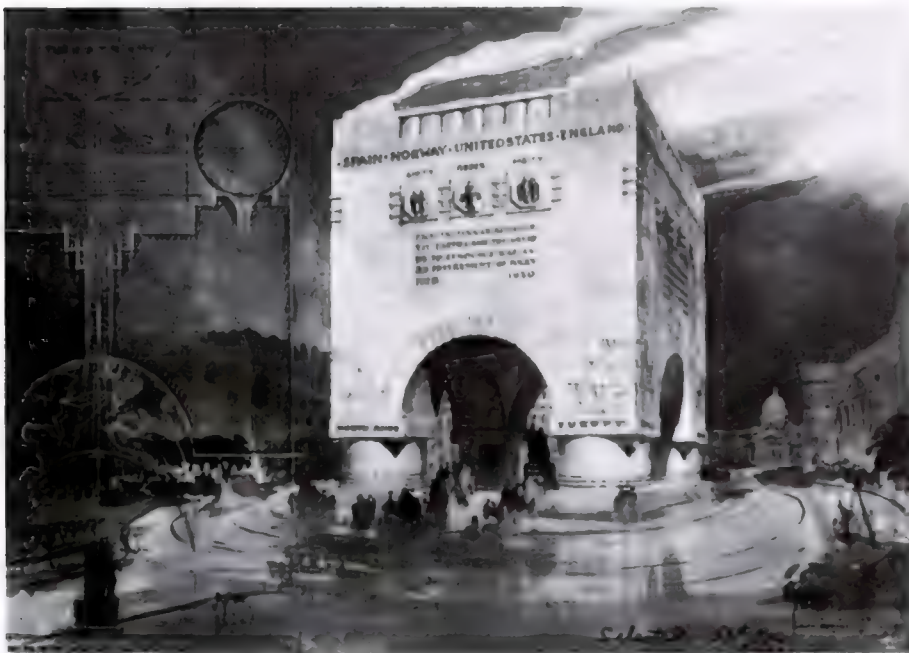
4.6 ARCHITECTURAL EDUCATION M.I.T.: THE 1930S AND AFTER

Lawrence B. Anderson

Lawrence B. Anderson, F.A.I.A. received his B.S., Phi Beta Kappa and B.Arch. from the University of Minnesota in 1927, taught for two years at the University of Virginia before coming to M.I.T. for his M.Arch. This he completed in 1930, when he won the coveted 23rd Paris Prize for three years study at the Ecole des Beaux-Arts. Anderson replaced Jacques Carlu as principal design teacher at M.I.T. in 1933; in the administrative reorganization instigated by Dean William Wurster he became head of the Department of Architecture in 1947 and dean of the School of Architecture and Planning in 1965. Lawrence Anderson has contributed extensively to the *Journal of Architectural Education* of the American Collegiate Schools of Architecture. After 1936 Anderson practiced with Herbert L. Beckwith as Anderson & Beckwith and later Anderson, Beckwith & Haible Architects

One hundred years . . . This section of that chronicle will have to begin near the midpoint, because the earlier half has become history and is without survivors. Looking back on that history, as we cannot help doing, we tend to see it as much less eventful than our later half. It is as if the pace of events is constantly quickening in geometric fashion, a perception that may not be inaccurate.

What was the state of architectural education in Boston about 1930? The Boston Architectural Center was on Somerset Street, M.I.T. on Boylston Street in the Back Bay, the Harvard School in Robinson Hall on that campus. At M.I.T. and Harvard the design staffs were headed by genuine Beaux-Arts gurus, Jacques Carlu and Jean-Jacques Haffner, respectively. The B.A.C. was staffed by native American architects, but here is the astonishing fact: Carlu and Haffner came to it on Monday evenings to give crits. It is an index of the profession's obsession with itself in that era; these eminent men had no other interests and commitments except to train new recruits. Over several centuries architects had slowly identified themselves as guardians of a particular field of knowledge and skill. After the Civil War they had begun to install their educational op-



"A Peace Memorial." Preliminary competition design for the 23rd Paris Prize. Student drawing by Lawrence B. Anderson (1930). Anderson studied architecture all over Europe in 1930–1933, and was particularly interested in Scandinavian design. He was the spirit of the M.I.T. architectural school from 1934 to 1974.

eration in universities, as an American idea whose time had come; but in 1930 and even today architectural study still retains aspects of the atelier concept inherited from earlier models.

In 1916, when M.I.T. moved to its new campus in Cambridge, its School of Architecture remained in the first building M.I.T. had built on Boylston Street near Copley Square. The School was dislodged only when its parent sold that building, which was replaced by the headquarters of an insurance company. I do not know what the arguments accompanying that decision were, but the fact is that the school was far more closely dependent on the practicing architects, many of whose offices were nearby, than it was on the university of which it was a part. And of course a twenty-year schism (1916–1936) reinforced that condition.

The School of Architecture ran a five-year program for the Bachelor of Architecture degree and a one-year program for the Master of Architecture degree; the former was the more popular by far. Many programs in the profession began as undergraduate majors, and this always set up an uncertain equilibrium between the need for some breadth in all liberal arts versus a minimal study of the professional lore itself. Medicine and Law, with their hoary prestige, had earlier escaped that dilemma by separating the two; and of course so did the Harvard architecture school since all professional education at Harvard was and is graduate education, and each profession enjoys a great deal of autonomy.

Under President Karl Compton, the Cambridge M.I.T. proceeded to strengthen its activities in the pure sciences and in the emerging fields of engineering. In order to give a strong foundation for these studies, it was necessary to provide a serious exposure to basic science and mathematics. The architecture program exempted itself from these requirements, and tried to get by with abbreviated versions called “general science,” usually taught by elderly physics professors no longer at the cutting edge of their field. Similar situations prevailed in areas like English and History, but there was really no way architecture students could conveniently attend classes, which might have been of better quality, in Cambridge. But the school’s faculty did include distinguished lecturers in the History of Art and Architecture. Students remained ignorant of modern science, but through a study of art acquired some insights about European cultures, especially pre-industrial ones.

Architecture was eventually moved, in 1937, to the Cambridge campus and the isolation that had been enforced during two decades soon became untenable. Some time after World War II, the architecture curriculum shifted to a four-year Bachelor of Science degree with a major in art and design, with professional formation occurring at the graduate level. The undergraduate program required participation in M.I.T.’s core studies in mathematics, science, and the humanities. The School of Architecture thus became absorbed in the overall undergraduate matrix, but has been able to make its own contributions through new offerings and activities in the visual arts, in studio work and in history, theory and criticism.

If I have dwelt so long on the M.I.T. example, it is not only because that is where my own experience lies, but also because I believe it to be representative of long-term trends in professionalism and all education of professionals. The service professions crystallized into exclusive societies in the nineteenth century;

they asserted control over recruitment and the transmission of their particular knowledge and skills. We all know that architectural education began in academies quite unconnected with universities. The latter had long traditions of concern with speculative and scholarly affairs: history, languages, literature, philosophy; they viewed all the new service professions as vocational and materialistic, and so initially they were. The amalgamation of the two forces has occupied us for a century, and is still going on. Every school has had to grapple with it according to its own circumstances. The B.A.C., for example, remains autonomous, not connected to some other larger body; but its students increasingly have college and other adult experience, making them in a sense graduate students.

Professional education reflects this amalgamation by raising its eyes from the nuts and bolts. Greater attention is paid to theory and to concern for the role of the profession in society, including its relevance to other fields. The history, not only of its noteworthy achievements, but about the cultures that produced them and the associated thinkers and writers, assumes larger dimensions. As compared to 1930, there is now a different tone.

To summarize, the initial concept of a service profession aimed to identify a clear-cut set of abilities that, with effort, could be acquired. This knowledge would be shared only with others in the field and could be exploited to yield success or even renown. The range of knowledge involved was considered finite; its exercise had to conform to recognized principles. One's peers who passed judgment always agreed in distinguishing among good, merely adequate, and reprehensible results. Anything new in architecture could easily be rejected as 'not beautiful.'

Swimming Pool, M.I.T., Cambridge (Lawrence B. Anderson, 1939). This economical, reductive design introduced Modernism and the International Style on the Cambridge campus while Gropius was receiving no commissions from Harvard.



At its worst, the Beaux-Arts tradition could lead to something of that sort, although it did turn out that the respect paid to Greece, Rome and the Renaissance was not wholly evil. And in my own salad days, the shackles proved to be badly rusted. There was a groping, decades long, for an architecture truly characteristic of a Machine Age. In the end, most of these efforts were swept into a bundle given the tag of "Art Deco," although the architecture thus termed was not always either artistic or decorated. When the leaders of the real modernism appeared on these shores and instilled a new set of perceptions and principles, squarely in opposition to the wisdom of the Academy, it did seem that we were truly being set free. Nevertheless, a certain aura of the arbitrary and the dogmatic persisted; was this not an infusion from another world, an infusion that had its parallel in the nineteenth-century French one?

Are we to believe that great architectures appear only when all its practitioners are united in their attitudes and when the culture concurs and rewards? Consider Athens in the fifth century B.C., or twelfth-century Ile-de-France. If this is so, then it is no wonder that so many of us are confused and sometimes appalled by the thousand flowers in today's architectural production. For we are losing all the old certainties; we cannot agree on the correct principles; we can no longer be sure which are the Great Books.

And yet it seems that education has come to a higher plateau, with greater freedom to examine, to compare, and to question the received wisdom. Inquiry is of the essence, and it is opposed to rote learning.

Pessimists complain that in so broadening our horizon we are losing touch with the craft of building, and they are right. That craft is now so diffused and compartmentalized that it can be mastered only by specialists, in the plural. We are no longer in the time when a knowledge of stereotomy, the geometry of stone jointing in vaults, is enough.

As for quality, maybe it is hidden somewhere in our apparent diversity, only to be recognized by future generations.

Stanley McCormick Hall, M.I.T., Cambridge (Anderson, Beckwith & Hoible, Herbert and Elizabeth Beckwith designing partners, 1962–1967): viewed through a window of the Kresge Auditorium (Eero Saarinen 1953). The program of teaching at M.I.T. was influenced by Scandinavian design through Lawrence Anderson, Dean William Wurster, and Ralph Rapson

4.7 RALPH RAPSON: MODERNISM IMPLEMENTED AT M.I.T.

Margaret Henderson Floyd

Ralph Rapson, F.A.I.A. received the B.Arch. degree in 1938 from the University of Michigan, winning a graduate fellowship to Cranbrook Academy where he studied with Eliel Saarinen and worked for several years with Eero Saarinen. He was head of the Architecture Department at Moholy-Nagy's Institute of Design in Chicago from 1942 to 1946, then was brought to M.I.T. by William Wurster, between 1946 and 1954. He was named professor and head of the Department of Architecture at the University of Minnesota 1954–1984. Rapson has been widely premiated and published as a practicing architect, receiving in 1986 the M.S. A.I.A. Gold Medal. He also served as judge in the competitions for the Boston City Hall and the new building for the B.A.C. During his tenure at M.I.T. Rapson taught at the B.A.C., implementing there for the first time a Modern architectural curriculum; he also advised the B.A.C. on their curricular accreditation program in the 1960s.

The shift of M.I.T.'s design curriculum toward the Scandinavian Modernism of Aalto and the Saarinens made the recruiting of Ralph Rapson a central objective for Dean William Wurster. Wurster had been to Copenhagen and must have seen Rapson, the Midwesterner, as a key figure on the new team in 1945.⁵¹ Rapson, like others of his generation, had been trained in the Beaux-Arts system, although his fascination with Modernism started early. Although



the University of Michigan was not officially in the Beaux-Arts group when Rapson was there in 1935–1938, the design program was headed up by the *Prix de Rome* recipient Professor Jean Hébard. Even at this early stage the iconoclastic Rapson, intrigued with Le Corbusier's method of drawing, refused to use watercolor and tempera for his final project, defying Hébard's normal tradition. He passed notwithstanding! Rapson worked with Eero Saarinen after he completed his fellowship at Cranbrook, having turned down an opportunity for "Taliesin," despite his admiration for Frank Lloyd Wright's work, because he felt the atmosphere was too centrally controlled. At Cranbrook with Rapson were Charles Eames and Harry Weese. This group followed Edmund Bacon and Jack Spaeth, whom Rapson believed were far more dedicated to urban design and planning than he and Eames.

Rapson decided against an offer from Richard Neutra in California to join Eero Saarinen in practice from 1939–1941 gaining exposure to the Scandinavian tradition through study and practice. He had great respect for Laszlo Moholy-Nagy's creativity and found direct experience with German Bauhaus ideas at the Chicago Institute of Design inspiring, because he also combined an interest in teaching with the competence of a fine designer. Rapson had an enormous effect upon the program at M.I.T. and also upon the B.A.C., where he also taught at the urging of Wurster, who was dedicated to the affiliation, even though M.I.T. had moved to Cambridge.

Recalling his decisions of those years, Rapson believes that his acceptance of Modernism was complete; his excitement about the future of architecture must certainly have been infectious. Dean William Wurster had picked a right man in his program to turn the M.I.T. curriculum around. "My pilgrimage to Boston, 1946–1954, was a Midwesterner's educational dream, but at that time I suppose that I would rather have been going to Harvard than to M.I.T. because we were all enthused with Modernism and Gropius was there." M.I.T. at that point was viewed by Rapson and others as more of a traditional, American school, while Harvard (with Gropius) had an international dazzle (See Stahl, Chapter 5.3 for an opinion of Wurster's M.I.T. after Rapson's arrival on the faculty). In retrospect, Rapson's vision of Harvard must have come in part through his association with Moholy-Nagy, but had he gone to Harvard in that interval, both he and Boston would have lost out, for at M.I.T. he had the opportunity to work closely with Alvar Aalto, Lawrence Anderson, Kevin Lynch and others. It was Rapson, the brilliant teacher and studio critic, who was F. A. Stahl's "ideal of the compleat architect, [whose] precise and elegant work reflected . . . an intelligence of the highest order," and who worked nights and weekends in the late forties to replace the Beaux-Arts program of the B.A.C. with a modern curriculum.⁵²

Various forms of Modern architecture started to appear in Boston during the post-war years, whereas before the war Modernism had been mostly theoretical. Alvar Aalto returned to M.I.T. to teach and also to design Baker House Dormitory and young Rapson taught in the graduate studio with him. Considering architecture an art form, Rapson has always aimed to synthesize the finest ideas into his own vision, drawing from Moholy-Nagy's inspiring Bauhaus theories, from the critical artistic focus of the Saarinens and from Aalto himself. Rapson was the lead designer for the Eastgate Apartments, now 100 Memorial Drive (with Carl Koch, William Hoskins Brown, Robert Woods Ken-

Eastgate Apartments, 100 Memorial Drive, Cambridge (Brown, De Mars, Kennedy, Koch and Rapson, 1951). The faculty at the M.I.T. School of Architecture designed a building much influenced by the work of J. J. P. Oud in Holland and of Alvar Aalto who had come to teach at the school and had designed Baker House Dormitory in 1947.



nedy and Vernon DeMars), which was erected in Cambridge on the north bank of the Charles in 1951. It was designed by the above M.I.T. faculty with Wurster's support, as a demonstration project for Modernism, as well as an investment for the New England Mutual Life Insurance Company and M.I.T.⁵³ The siting on the river and the introduction of individual balconies was inspired by a visit to the Netherlands by the insurance company president. Meanwhile, the curvilinear form of Baker House had also risen on the M.I.T. campus beginning in 1947. Rapson's practice was otherwise minimal in these years, since he envisioned himself as only temporarily in Boston.⁵⁴ Besides his work at M.I.T. on the Eastgate Apartments, he and his wife opened the first modern furniture and furnishings store in Boston, an area of design in which Rapson had been much interested since his days at Cranbrook with Charles Eames. "Rapson's Rapid Rocker" was the last word in design circles in the late 1940s, anticipating Benjamin Thompson's later Design Research Store in Cambridge.⁵⁵

In 1951, when the Marshall Plan was leading Europe's post-war recovery, Rapson won the commission for four U.S. embassy buildings in Europe. Leaving for his first extended, three and one half year European work and travel experience, Rapson designed the first Modern United States embassies in the world; here emerges his inspiration, distilled from combined exposure to the great streams of Modernism. Sited high on a hill, the Stockholm embassy is imposing, expressing the monumental nature of civic architecture in an elegant form; incorporating Miesian delicacy in two juxtaposed cubes.⁵⁶ Returning briefly to M.I.T. after an additional two years in Paris, where he designed U. S. embassy staff housing in Boulogne and Neuilly, France, Rapson was appointed professor and head of the School of Architecture at the University of Minnesota in 1954. After more than fifty design awards, the Gold Medal of the M.S. A.I.A., and a distinguished teaching career, Rapson has established a national reputation with works such as the Guthrie Theater in Minneapolis.⁵⁷

Architectural design is physical art and the act of resolving the conflict of man and his environment. Design is a complex and intricate process, yet deep within any given environmental situation there lies a natural or organic solution. There are many factors and components—such as historical continuity, regional and specific site conditions, physical and psychological needs of society, structural innovations and technological advantage, expressive form and creative space—that shape our environment. Only by careful and sensitive analysis and by diligently sifting all factors within the framework of our times does the creative synthesis evolve.⁵⁸

Although Walter Gropius, Ise Gropius, Hugh Stubbins and others appeared subsequently in the "New Trends in Design" lecture series, established by Arcangelo Cascieri in the forties and fifties at the B.A.C. in Boston, the embattled Harvard constituency had little time actively to support the transition of the B.A.C. curriculum to Modernism. Dean William Wurster first taught at the B.A.C. himself for two years, becoming committed to the involvement of the M.I.T. faculty. Then he saw to it that a pragmatic, step by step mechanism was in place for the club to become more organized as a school, and then to move toward the new architecture. Teaching at the B.A.C. was effectively a requirement for Rapson during his affiliation with M.I.T. Wurster had picked Rapson whose teaching skills had always been superb, honed in his years with Moholy-Nagy. Working continuously with them on their projects, Rapson brought both imagination and experience to the B.A.C. students from the Saa-

U.S. Embassy, Stockholm, Sweden (Ralph Rapson and Associates, Inc., 1953). Designed by Rapson while on leave from M.I.T., America's first Modern overseas embassies were commissioned in Sweden, Denmark, Finland and the Netherlands from the same architect. Those in Sweden and Denmark were built. Their powerful forms unite the major streams of Modernism, while deriving explicitly from none.

Tyrone Guthrie Theater, Minneapolis, Minn. (Ralph Rapson and Associates, Inc., 1962). The *brise-soleil* and articulated design of the Tyrone Guthrie Theater were a later work of Rapson, a major figure in M.I.T. and Boston architectural education. The complex program of the theater interior reflected a similar style.



rinens, from his exposure to Wright and Neutra and the Modern movement in the West and above all with his own ideas. "I always was interested in drawing," says Rapson, "I took lots of extra life drawing classes at Michigan because I had extra credits and of course there was a lot of emphasis on that sort of thing when I was with Moholy-Nagy in Chicago. And I was also interested in History. We got Hitchcock to teach at M.I.T." Professor Leonard Eaton interviewed Rapson in 1953 and commented, "He must always have been a dominant personality, committed to the importance of knowledge and of architectural history and yet convinced of the language of Modernism."⁵⁹

Unlike Gropius, Rapson admitted of a contextual approach to design by the time he assumed the chairmanship of the Architectural School at the University of Minnesota in 1953. Supported by Cascieri, Rapson was the agent for transferring the B.A.C. student body, organization and curriculum into Modernism. While many others were involved in this program aimed to expose the B.A.C. students to the new architecture, in the end, says Arcangelo Cascieri, it was Ralph Rapson who accomplished it.⁶⁰ Rapson always believed in the importance of history, disagreeing with the normal Modernist's stand on that subject, and yet his ideas on the accreditation process of the profession have been mixed. During the crisis of accreditation for the B.A.C. Rapson had serious questions as to whether the Center would lose its originality and individuality in the process of forced conformity to the National Architectural Accrediting Board. At the same time his 1984 survey had drawn negative conclusions as to the effects of Post-Modernism as it utilized a return of the image into architectural design.⁶¹

Generating teaching excitement and direction to the program, Rapson was essential at the B.A.C. in the lean years of the 1940s. Returning as a judge for both the Boston City Hall and the B.A.C. competitions, Rapson has maintained ties with Boston, adding a national perspective to civic design decisions. Although he views himself as a Midwesterner, Rapson has provided inspiration through his work at M.I.T. and has contributed substantively to architectural education and Boston.

4.8 HUGH STUBBINS: OUTWARD FROM BOSTON TODAY

Margaret Henderson Floyd

Hugh Stubbins, F.A.I.A. received the B.Arch. from Georgia Institute of Technology in 1933 and the M.Arch. from Harvard in 1935. After practicing with Royal Barry Wills for several years during the Depression, Stubbins started his own firm in Boston and then joined the faculty at Harvard University at the request of Walter Gropius with whom he taught during Gropius's tenure at the School of Design, 1939–1952. The education and professional activity of Hugh Stubbins draws from all sides of Boston architecture. Stubbins had just returned to his native Birmingham when Gropius, newly arrived, recalled him, sight unseen, to Harvard. In Boston Stubbins always practiced separately from Gropius, teaching with him at Harvard during the entire period of Gropius's tenure at the Graduate School of Design.

"Because I obtained my graduate degree at Harvard and subsequently taught at the Graduate School of Design with Gropius during most of his tenure (1938–1953), many people have erroneously concluded that I was his student," says Hugh Stubbins, Boston's show-stopper architect of the mid-twen-

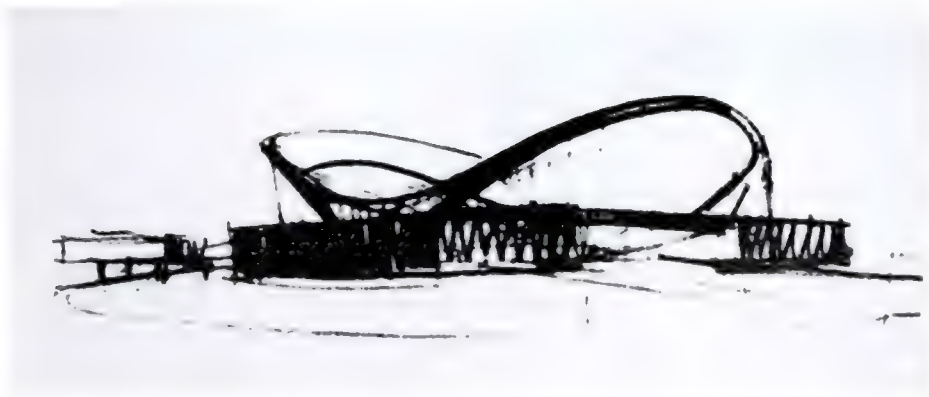
tieth century. "Actually, I had never met Gropius before he invited me to come to Harvard in 1938. Considering myself to be a regionalist, I quite frankly had serious misgivings regarding aspects of the Bauhaus system of design, but I was much interested in others."⁶²

Birmingham-born Stubbins maintains that he has been lucky, because he entered the architectural profession at that moment before World War II when he could still receive—as did the greatest of Modern European architects—a strong, traditional education. Stubbins completed undergraduate study at the Georgia Institute of Technology, then the center for architectural education in the South, where Harold Bush-Brown first introduced him to the Beaux-Arts system. The Master of Architecture course at Harvard in 1930 was firmly grounded in the precepts of the Ecole des Beaux-Arts under the regime of Jean Jacques Haffner whose courtly, military bearing and talent attracted young Stubbins. Having induced Haffner to match (for two years) the scholarship he had been offered by Carlu in the one-year program at M.I.T., Stubbins arrived by bus at the Boston Y.M.C.A. in 1933.⁶³ Winning first place in the competition his first year, Stubbins obtained from Haffner an introduction to the strong design principles that are one source for the magic of his monumental architectural solutions. Stubbins's self confidence as a designer and his pocketbook were also fortified in the lean 1930s when he won competitions.⁶⁴

When the presidential medal that Royal Barry Wills won from Herbert Hoover in 1932 passed in 1933 to Richard Neutra, a Viennese Modernist transplanted to southern California, Wills decided to expand his small house line. As the depression hit, Stubbins answered an ad for the job with Wills, gaining indispensable experience and the opportunity actually to follow a project from start to finish. Stubbins stayed four years as a delineator and the token "Modernist" in the three-man Wills office. Working nights and weekends, Stubbins came to admire Wills's character, his quality as a designer and his ability to apply his regional sensibilities and structural intuition so powerfully. Stubbins thus gained both friendship and competence in one of the few Boston offices receiving national recognition in those desperate years, for Wills and Stubbins shared strong design sensibilities, despite differences in style.⁶⁵ Stubbins, the Southerner, absorbed in these years Wills's New England orientation, which was so strongly demonstrated in the fine proportions of his small houses, and likewise learned respect for the needs of the client. "Function," he says, "in terms of the building working for the client, must come first—that is the architect's responsibility. Then the structural system must be honest and forthright, but not necessarily serve as the expression of design."

Stubbins's Modern versions of Wills's small house introduced glass walls and butterfly roofs to provide the more avant-garde of New England clientele with an alternate model. Despite their stylistic departure towards Modernism, the stone, terrace walls and site sensitivity of these early designs retain much of Wills's regional spirit, being closely linked to the landscape. In the award-winning Country School in Weston, Massachusetts (1952), and other solutions for academic designs which came into his office right after the war, Stubbins would reapply these small house principles within a new typology. Even after 1955 in his monumental urban buildings, design by principle—a painstaking analysis of the program—has been characteristic of Stubbins's work.⁶⁶

Stubbins practiced for a few years in Boston on his own, deciding finally to



Congress Hall, Berlin, West Germany (Hugh Stubbins, 1957). The powerful signature of this designer of public buildings became international after World War II. Although teaching with Gropius for thirteen years at Harvard, the architect has been an admirer of Scandinavian Modernism, of the Saarinen and of Aalto.

accept a position in Birmingham; within weeks he received the Wheelwright Travelling Fellowship from Harvard and a summons from Walter Gropius to join him at the new Graduate School of Design in 1939.⁶⁷ Stubbins was persuaded by Gropius, despite his misgivings about the Bauhaus system and his own commitment to regionalism. A convinced theorist himself, Stubbins responded to Gropius's vision for the social purposes of architecture, but could never accept the concept that design should be demoted to mere method. Forfeiting the Wheelwright Fellowship with the war mounting in Europe, Stubbins settled down to thirteen years of teaching at Harvard and to independent practice.⁶⁸ After the war, his practice enabled Stubbins to distance his own development from that of Gropius's students, The Architects Collaborative (T.A.C.), which touted a strict Bauhaus system of collaborative design.⁶⁹

The post-war period concluded with a year as dean of the Graduate School of Design at Harvard in 1953 immediately following the resignation of both Gropius and Dean Joseph Hudnut. Stubbins's work during these years of teaching evidently provided an incubation period for some design ideas which came together in 1957 with Congress Hall in Berlin, a building which initiated a new, international phase in his practice. Here he introduced curvilinear elements that were also appearing in the post-war work of Le Corbusier and Frank Lloyd Wright, but that had traditionally been central to the designs of Alvar Aalto, the architect whom Stubbins most admires.

In no way could I have ignored the Scandinavian design impact. Even in the 1930s—although I often placed second—I was always being beaten for the first prize by Saarinen. That state of things attracted my attention. Then of course came my contact with Aalto during his years at M.I.T. Later I competed again against Saarinen for the World Health Organization (W.H.O.) in Geneva.⁷⁰ That is why my success at the Countway Library at Harvard Medical School was so important to me—because Saarinen had been interviewed earlier and had recommended that it be put underground.⁷¹

Stubbins's Countway Library is above ground, but his Pusey Library in Harvard Yard is underground. Although Stubbins might not agree, his two libraries for Harvard define the power of his quality as a designer perhaps more clearly than his other work. The Countway Library was designed (1965) simultaneously with the New City Hall and the new B.A.C. building, while Stubbins was serving as chair of the Mayor's Blue Ribbon Design Committee. Both libraries were contextual nightmares from a planning standpoint, because of the dominant

environment in which they were to be inserted. The Countway, above ground, gives Stubbins more design satisfaction. Here he went some distance toward use of the New Brutalism in the articulated and projecting superstructure, but the gentle reforming of the classical proportions of the earlier Medical School campus persists so forcibly in his Modern building, that it both maintains a strong identity and becomes a part of its context.⁷² The Pusey Library in Harvard Yard (1973), entirely below grade, is more dramatically revealing; it was the result of an initial planning study commissioned by Harvard. A complex linking organ between three other libraries, Pusey more than almost any other work by Stubbins shows commitment to contextuality along with pragmatic design solutions. The generous proportions of the underground spaces are flooded with light from the moat which surrounds the building, and lighted display cases in the broad corridors. Even the underground entrance has presence. "I admired Joseph Hudnut's views about the form of cities and never agreed with Gropius about abandoning the study of history, but I used to be a lot more arrogant," says Stubbins. "I thought at first that Harry Shepley was an old fuddy-duddy, but I found out what good work he was doing. The BB Chemical Company was a fine building, and . . . when I was chairman of the Mayor's Blue Ribbon Design Committee with Shepley, Sert and Lawrence Anderson I think Shepley had accepted Modernism."⁷³ Stubbins has remarked, "At any

Francis A. Countway Library of Medicine, Harvard Medical School, Boston (Hugh Stubbins, 1965) Above ground, unlike his Nathan M. Pusey Library in Harvard Yard which is almost entirely below grade, Countway reorganizes the classicizing forms of the surrounding Harvard Medical School campus; it also introduces the contemporaneously popular New Brutalism and abstract Classical configuration of works such as the Boston City Hall.



point in time we are only the link between the past and the future and must look in both directions to interpret the present."⁷⁴ No building has better achieved this goal than the Federal Reserve Bank in Boston, which initiated the rehabilitation of the South Station area.

In retrospect, Stubbins's vision of context for architecture seems to have been a continuous phenomenon. Luck was doubtless at work, but Stubbins's ability to listen and to synthesize ideas was probably the essential skill that enabled him to draw the best from Haffner, from four years in the office of Royal Barry Wills, and from thirteen years of teaching at Harvard. His architectural education, like Rapson's, is of particular importance in that, because he was already mature as a designer before exposure to pure Bauhaus theory, he is able to draw freely upon multiple sources of inspiration. Stubbins emerges as the quintessential product of architectural education in Boston. Great designers may be born, not made, but Hugh Stubbins's education and practice in Boston appear to have prepared the way for his international emergence in the 1950s. In the end Stubbins's greatest work has been in monumental architecture; in this field he has had few peers. His landmark buildings—Citicorp in New York and the Federal Reserve Bank in Boston—have unforgettable design qualities as art.⁷⁵

Federal Reserve Bank, Boston (Hugh Stubbins, 1978). The United States Government's recent tall building in Boston approaches the distinction and the landmark power of Robert Peabody's Custom House Tower; it initiated rehabilitation of the area around South Station.



5 ARCHITECTURAL EDUCATION AND BOSTON: 1960–1989

INTRODUCTION

Margaret Henderson Floyd

We are plagued [in the modern era] not only by the anonymity of life but also by another tendency of the era of technology—the tendency almost to regard the whole material world as expendable. Traditionally man thought of most of the things in his environment as permanent.

It is hard for many people not to think that buildings, too, are throwaway products. To a very large extent they have indeed become so. Yet I think we must fight for the principle that architecture can never be ephemeral in the same sense that vehicles, appliances, or tools are. This is partly because architecture is on the land and what we ultimately do to the land is in a way just as important as what we ultimately make out of people. Even if we throw away the curtain wall, we keep the skeleton. Even if we tear down the skeleton, we keep the framework of city structure into which the buildings fit like teeth in a jaw . . . this is part of the reason why architecture is not a throwaway product. The other part is that architecture, being a creative work of the mind, has an existence independent of the material of which it is built, just as the permanence of a book is not dependent entirely on the life of the paper on which it is printed.¹ —Lawrence B. Anderson (Plate 1)

By the 1950s the first crisis of Modernism had passed and all three schools in Boston were severed from the Beaux-Arts system. But new challenges of urban design and planning were coming into focus as urban renewal programs came into being. The political context of architecture became more complex than ever before. The Harvard constituency was aware of the need to pursue Gropius's collaborative ideal for city planning at the School of Design after the tumultuous departure of Gropius and Joseph Hudnut in 1953. In his "Welcome Address," Josep Lluís Sert as the new chairman identified a somewhat different direction for city design as the School's central challenge:

It is a little difficult today to deal with this aesthetic factor because people may say you are going backwards, using some of those same words we heard in schools many years ago as part of the program the Beaux-Arts was trying to promote. But it is not true. I think we should make a very clear line of division. There are some things that have been eternally in architecture, regardless of styles, regardless of time. Those are the factors that tie man to everything that is beautiful, to which man normally reacts and appreciates, which contribute to make a better living, a better environment for man; that is the key word.²

Sert's new complexes, Holyoke Center and the Science Center, linked the three Harvard Yards in a masterly design solution for that fragmented urban campus. But Harvard continued to seek name architects, producing the Carpenter Center (1963), Le Corbusier's only American design, a construction that his admirer Sert actually executed. And Minoru Yamasaki's William James Hall (1964) introduced another large, non-contextual design at Harvard. Sert's own house

in Cambridge was much admired, setting the precedent for the patio house, derived from indigenous Latin American domestic forms that he had developed while working with Le Corbusier and Paul Weiner. It influenced the award winning Flansburgh patio-house in Lincoln (1975), an unusual departure from the New England idiom.³ Meanwhile, Dean Pietro Belluschi came from Portland, Oregon to replace William Wurster in 1951 at M.I.T. His work extended the more romantic and contextual Modernism which had been introduced by Lawrence Anderson and the California regionalism of William Wurster.⁴

Pressures of urban decay and growth were severe in Boston and culminated with the razing of the West End to make room for the new Charles River Park in the late 1950's and of Scollay Square to become the Government Center. Then new construction was proposed for the Back Bay. A common concern with questions of urban design was demonstrated early in 1963, when the Citizens Committee for the Back Bay was formed under the chairmanship of Lawrence Anderson.⁵ That committee, composed of all the architects in Chapter 4 (except for Royal Barry Wills and Isidor Richmond), and also a group of leading citizens, presented Mayor Collins with a plan to preserve and enhance the Back Bay, then threatened with a proposal for high rises on alternate corners of Commonwealth Avenue, an echo of Le Corbusier's Voisin Plan for Paris (1922).⁶ They proposed a zoning ordinance to allow for rehabilitation of the existing structures in the old Back Bay. The timing of this early effort, acknowledging the importance of urban form, predated the national historic preservation legislation by three years.⁷ The group, called the "Committee for Commonwealth Avenue," requested from the mayor a control board which would "restrict building height and preserve the architecture of the area." They termed Commonwealth Avenue "a unique and incomparable park feature, as significant for the shape of greater Boston as the Common, the Public Garden or the Fens."⁸

These leaders of the architectural profession, most of whom supported Modernism, new trends in architectural education, and the City Hall Competition for the new Government Center, recognized the need for visual integrity in the Back Bay. While they approved the new B.A.C. Building then rising on Newbury Street, the senior architects sensed that towers on alternate corners of Commonwealth Avenue would irrevocably violate the urban form of the district. At that time the Back Bay, like the central city, had fallen on hard times; no hint had yet appeared of the rebirth of this site of Boston's nineteenth-century development. Yet Anderson's committee was convinced that somehow it must be saved without being disfigured. Unexpected as it was at that time, their unified effort diverted the political process and the economic imperative of Mayor Collins just long enough for the "High Spine" concept to be formulated, which channelled tall buildings south of Boylston Street on a corridor to the Custom House Tower.⁹

To a large segment of the population, the vast urban renewal programs of the 1950s seemed perfectly designed for infusing new energy and excitement into a moribund city. Charles Harris's review of the rise of environmental concern and "The Architect's Plan for Boston" with its "High Spine" concept, formulated by Robert Sturgis's Civic Design Committee of the Boston Society of Architects demonstrated the new importance of urban design. This concept reflects modern concern with the shape of the city, the interstices between build-



John Hancock Tower (Henry Cobb and I. M. Pei, 1968–1975) and Trinity Church (H. H. Richardson, 1872–1877), Boston. Extraordinary controversy surrounded the siting of this sculptural skyscraper which initiated the “High Spine” concept, along a path that runs toward the peninsula from the Prudential Center; its visual quality has added power to the Boston skyline while its reflective glass has made it a “disappearing” building on Copley Square adjacent to H. H. Richardson’s famed Trinity Church.

ings and the effect of the political process and economic conditions on Boston architecture. But change causes pain, and various areas of the old city were levelled in the 1960s before the struggles of a pioneering few with insight and conviction, such as F. A. Stahl, succeeded in rescuing some key components of the urban fabric. Young architects such as Joseph Maybank were suddenly required to reapply their skills in constricted urban preservation environments such as Cambridge where his Kennedy School was built after years of controversy, and yet achieve quality in design.¹⁰ Indeed, America’s renaissance cities of the 1980s, Boston and Pittsburgh, both depend on the salvaging of architectural context for their charisma.¹¹ In this process of upheaval and renewal the B.A.C. became unexpectedly important. Students discovered the B.A.C. in their search for non-authoritarian, experimental education, but the sudden growth created by their arrival required changes for which the B.A.C. was institutionally unprepared. Miraculously, under the leadership of Urs Guchat and other associates, Cascieri’s small-scale architectural studio or *atelier* received national accreditation in the late twentieth century, satisfying all the requirements of that status. The erection of the new building on Newbury Street (precipitated by urban renewal at the old center on Somerset Street, Beacon Hill) became in itself the symbol of rebirth.

5.1 THE ONCE-LONELY TURF: NEW DIRECTIONS FOR LANDSCAPE ARCHITECTURE AT HARVARD FROM 1958 TO 1970¹²

Charles W. Harris

Charles Harris, Professor Emeritus and past-chairman of the Department of Landscape Architecture, Harvard's Graduate School of Design. He was a graduate student at Harvard in 1952 and has taught there since 1948. From 1959–1962 Harris worked on a part-time and later full-time basis for The Architects Collaborative under Walter Gropius on the New University, Baghdad. He was a co-editor with Nicholas T. Dines of the *Time Saver Standards for Landscape Architecture: Design and Construction Data*, published by McGraw-Hill in 1988. The consulting editor was Albert Fein and the 'Forward' was written by Hideo Sasaki.¹³ Charles Harris is now teaching Harvard's Land Development Studio.

Even *Fortune* magazine was moved to devote its entire February 1970 issue to the theme: "The Environment: A National Mission for the Seventies." "Now that environmental anxieties have coalesced," wrote its editor, "they will be a permanent part of the American awareness, part of the set of beliefs, values and goals within which U. S. business will operate." Thus, with a sudden rush, coming from all sides, everyone seems to be running to stake out a place on what was the once-lonely turf. Out of this era grew a concept about the planning and design of the environment that had not existed since about a hundred years before, when many of the same types of environmental problems were of national concern. Writers, ministers, doctors, teachers, politicians, businessmen and many others of that earlier era sought or proposed ways to solve these problems. Only a few of them perceived the need to rationalize and professionalize their complex social goals into an integrated and humane process for planning, shaping and developing man's environment. One of these was Frederick Law Olmsted. Under his leadership a few individuals came together from a wide range of fields to create and practice a new profession, which they came to call Landscape Architecture.

This new professional area of concern had no educational programs until 1900 when Harvard's president Charles Eliot persuaded the son of F. L. Olmsted to organize and head the world's first professional training program in landscape architecture. From that beginning evolved America's first courses on city and regional planning in 1909 and by 1923 the first degree option, Master of Landscape Architecture in City Planning. In 1929 with the support of a Rockefeller Foundation grant a separate School of City Planning was created with its own degrees. This split of city and regional planning from landscape architecture was to prove a great loss to both groups over the intervening years.¹⁴ When Harvard formed the first School of Design in America it once again provided an opportunity for the three disciplines of architecture, landscape architecture and planning to come together. Dean Hudnut invited Walter Gropius to come from Germany and bring his concepts for collaborative education from the Bauhaus to Harvard. In his role as chairman of the Department of Architecture he advocated team teaching and collaborative work among the various students within the school. Over the next sixteen years we saw many dramatic changes take place within architectural education and practice. Landscape architects found new opportunities for effective collaboration both within Harvard and outside. The broad views and approaches that Olmsted's son and many other early landscape architects espoused could once again be studied via large-scale, school-wide collaborative studios;

those of Garrett Eckbo, Daniel Kiley, John O. Simonds, Lawrence Halprin, Hideo Sasaki, Robert Zion, Ian McHarg, Richard Haag, and Philip Lewis, Jr., to name but a few from various classes between 1937–1952.

Starting in the fall of 1953, Josep Lluís Sert became both dean of the school and chairman of the Department of Architecture. At that time, for financial reasons, the planning program was once again combined with landscape architecture under the chairmanship of Reginald Isaacs. Three years later in 1956 they split up again when Walter Chambers was made chairman of Landscape Architecture, until August 1958 when he resigned to become chairman of Landscape Architecture at the University of Michigan. Hideo Sasaki, a young associate professor in the department for the previous five years, was asked to take over the chairmanship. After Hideo's first two years as chairman, the department adopted an evolutionary plan for change. This plan called for moving from a one-year "advanced masters program" to a two-year program. This additional year in the Master of Landscape Architecture program for "advanced students" made it the first two-year program in the U.S.A. To use this new two-year format more effectively, the department divided the terms or semesters into two segments or "quarters" of seven to eight weeks each. Each segment was to have a particular focus with its own interdisciplinary teaching team for the major studios. Many of the support courses were then coordinated with the integrative studios. In this way Hideo and his small group of part-time teachers/practitioners were able to initiate a process of gradual change that involved two phases during his ten years as chairman.

The first phase of this change concentrated on developing strong, design-oriented landscape architects. The department's graduates became known more and more for their design knowledge and talent. A high percentage of them, in some cases more than half of a class, soon became young teachers in undergraduate programs of landscape architecture throughout the U.S.A. and around the world. The second phase was an outgrowth of the success of the first. It started around 1965–1966, when increasing numbers of "advanced graduate students" began wanting to come to Harvard after having been taught by recent Graduate School of Design alumni in their respective undergraduate programs. Thus, while the first phase of development required drawing heavily upon the knowledge and talent of people from strong design-oriented professional offices, such as Sasaki's office in Watertown, the second phase required new kinds of knowledge and talent, most of which could not be found in a typical professional office. These included study of natural systems and resource analysis methods, application of computers, regional science, aerial photo-interpretation, visual perception and analysis to the introduction of environmental history, creative problem-solving and educational psychology as applied to design education. The design focus was retained, but the "sciences" were added with applications related to areas of present and emerging practice such as campus planning and design, design of housing and communities, to collaborative studies of large urban and regional areas. Frequently these latter were done in collaboration with faculty and students from City and Regional Planning and, less frequently, with the so-called "Masters Studio" in architecture or the newly created urban design program.

The second phase of Sasaki's chairmanship started to bring in new faculty



Smithsonian Museum, Washington D.C. (Jean Paul Carlhian, 1986). The designs of Richardson's successor firm have continued at the highest level on a national scale and in Boston for a century. These works are particularly felicitous environmentally.

and visitors to broaden the base. The earlier system of team-planning provided an effective way to bring in and use a wider range of non-landscape architects. Also, it permitted all members of the department to work together and learn from each other. At the same time members of the teaching team began to seek outside research funds to allow them and students to develop new ideas, methodologies, and tools for application to a growing range of environmental planning and design problems.

In 1967 the department created a research office to house and coordinate this new research activity. All types of research projects were undertaken from the study of the interconnections of economics and environment to the improvement of highway layout and design. Extensive research involved interactive computer analysis methods. Over three million dollars in outside funds eventually was raised to support these new activities over a period of six to seven years. At this time research was making a significant impact upon the department's teaching programs and was expected to play an even more important role in the coming years within the school's other programs and their respective professions.

Thus, the initial major goals of the program when Hideo Sasaki became chairman in 1958 were to recruit and train design-oriented landscape architects, capable of assuming important professional and leadership roles in offices and schools across the nation and in other countries. Then over the intervening years, new energies and resources were found to explore and develop the more advanced and emerging areas of the profession of landscape architecture and its allied professions represented within the school.

Under the leadership of Hideo Sasaki, the decade of evolutionary change (1958–1968) had an almost revolutionary impact upon the nation's major educational programs and professional offices.

He also supported and participated in the launching of a nation-wide study of the profession of landscape architecture and its changing role in our society.



American Academy of Arts and Sciences (Kallmann, McKinnell & Wood, 1985). The poetic Japanese forms of the roof of the Academy resemble Langford Warren's Carey Cage at Harvard more than Kallmann and McKinnell's Boston City Hall of the 1960s

Massachusetts Bay Transportation Authority Commuter Line, Ruggles Street Station, Northeastern University, Huntington Avenue, Boston (Stull & Lee, 1986). New stations for the extended Orange Line have recently reintroduced classicism to Boston public architecture in monumental and literate ways. Their landmark quality, but larger scale, uses glass and metal as did the original stations of the Orange Line by A. W. Longfellow, Jr



The Ford Foundation provided a major grant to do this study under the joint sponsorship of the American Society of Landscape Architects (A.S.L.A.) and the National Council of Instructors of Landscape Architecture (N.C.I.L.A.), now called Council of Educators of Landscape Architecture (C.E.L.A.). Professor Albert Fein, the American historian who has written so much about the life and works of Frederick Law Olmsted, Sr., was made the director of this study. Professor Fein was then a visiting professor at Harvard and remained in this position until just before his death in the spring of 1989.

Hideo Sasaki helped conceive the school's proposed new Program in Advanced Environmental Studies (P.A.E.S.) and was instrumental in helping secure a Ford Foundation grant to create the first endowed professorship under this program, the Professor of Advanced Environmental Studies in Ecology. This new professorship came just before the 1970 launching of the nationwide Earth Day and the sudden surge of interest in and concern for the quality of life and its environmental context. Thus, Hideo's era of chairmanship went from encouraging landscape architects to address larger and more complex environmental planning, design and development issues, to find that all of a sudden everyone seemed to be rushing onto this same once-lonely turf.

5.2 URBAN PLANNING: CHANGING CONCEPTS

Robert S. Sturgis

Robert S. Sturgis, F.A.I.A. graduated from Harvard College and the Graduate School of Design under Walter Gropius and has practiced in Boston, first with Shepley, Bulfinch, Richardson & Abbott and then independently since 1964. Sturgis has served as chairman of the Civic Design Committee during the 1960s, president of the Boston Society of Architects and chairman of the board of the Boston Architectural Center.

About architecture two questions continue to be asked. What does it include and how is it taught or learned? In history an education in architecture most often meant that a young man learned as an apprentice to a master. But there is also a monkish, scholarly tradition from the Middle Ages. Further, the artists of the Italian Renaissance especially did not feel that a distinction had to be made between architecture, painting, sculpture, the engineering of a dome or the design of a public space, and even today an architect in the Soviet Union, Italy or China, for instance, is expected to be a city planner and a landscape architect as well as the designer of single buildings.

But following the specialization of commerce and of industrialization in the last two-hundred years, American architects began in the mid-nineteenth century to think of themselves as separate from other artists and builders. They were followed by landscape architects in the early 1900s and city planners in the 1920s. As recently as the 1960s, a number of American architectural schools turned out graduates who felt no obligation to respect the natural surroundings of their designs or even to acknowledge their immediate architectural context.

The constraints and disciplines of scholarship were perhaps best reflected in architecture at the Ecole des Beaux-Arts, in the tradition of the French Academy, which every aspiring and ambitious American architect from about 1850 to 1930 was encouraged to attend. But not everyone who called himself an

architect accepted such limits. Chicago's Daniel Burnham, responsible as much as anyone for the City Beautiful movement, operated on a grand scale, melding art with commerce and politics, even though his idiom was academic and classical. In a different mould but with a similarly large vision, Frank Lloyd Wright designed furniture and also Broadacre City, and to the end he was openly scornful of academic tradition.

In Germany, whose scholastic methods had been especially influential in the United States before World War I, it was perhaps both appropriate and necessary that a rebellion should come in the form of the Bauhaus, founded by Walter Gropius after that disastrous war, where every art and craft was explored and taught under the same roof as architecture. The Bauhaus not only brought together the arts which had been separated, but did so in the context of new technology and new economic and social perspectives. Soon ostracized in their own country by the Nazis, most of the important talents of the Bauhaus came to America; Gropius himself came to Boston.

Modern Architecture comes to Boston—1935 to 1945

At the time of Gropius's arrival, Boston's three architectural schools, as most others in America, were still under the influence of the Beaux-Arts tradition, although the junior faculty at M.I.T. were beginning to challenge their elders. The message of the Bauhaus and the International Style (both perceived as Modern architecture although not really the same thing), had preceded him in America through publications and reports back from visitors to Europe. Gropius's first action at Harvard was to bring together the three Departments of Architecture, Landscape Architecture, and City Planning under one name, the Graduate School of Design. More than that, as chairman of the Department of Architecture, he introduced the practice of collaboration between first-year students of the three departments on large-scale design problems. This process was repeated each year. Twenty years later, this collaboration would be called "urban design"—but not until Gropius's brave new world of technology and technical standards for structure, light, and air had been mellowed by varied personal experiences and insights. Indeed a more historical and humanistic tradition was represented in courses on civic design taught by Dean Joseph Hudnut, who used the examples of older European cities.

The new influences from Europe did not become visible at M.I.T. nor at the Boston Architectural Club until after World War II. William Wurster from California, who had attended Harvard's Graduate School of Design during the war, was soon to become dean at M.I.T. Although more interested in the personal and emotional effects of architecture than in grand schemes, Wurster brought together and nurtured a talented faculty beginning in 1944, one which avoided preconceptions and explored new directions in architecture, planning and technology. The Boston Architectural Club was soon to feel changes when this new crop of faculty and recent graduates of the two Cambridge schools volunteered their evenings to teach across the Charles River.

The New Wave Takes Hold—1945 to 1955

After the war, returning veterans and all whose focus had been on the war effort expected and looked for a new world. For the general public that meant

starting a family, a house of one's own, an automobile, and for many, an unexpected chance for a college education. These hopes and expectations had been formed earlier. Many city dwellers had wanted to move to the suburbs as soon as the Model T made it possible. The "ranch" house was designed and marketed to suggest the free-and-easy life of California. The total mobility and freedom illustrated by the General Motors Futurama at the 1939 New York World's Fair became a personal goal. With the help of Congress, assembly-line house builders, highway engineers, automobile manufacturers, and real estate entrepreneurs made the most of their opportunities and changed drastically the suburban landscape of the United States.

For the most part, architectural education willingly embraced this new world. Much of it was foreshadowed by the concepts of Le Corbusier, the English and Dutch new town ideals, the Chicago School and the California style. And of course freedom, choice, and mobility were near the center of the American ideal as seen by all the world. The task of architecture and planning was to deal with the present but also to think of the landscape and the city in new ways. Few speculated on how the consequences of such material success might be seen thirty or fifty years later.

Before this post-war boom, Walter Gropius's program at Harvard had already been well-launched. It encouraged students to tackle large-scale problems, both in considering what architecture might mean to the city and how a better life might be achieved by the design of suburban community centers and satellite new towns. Perhaps the most dramatic example was a collaborative student thesis for the design of downtown Providence, Rhode Island. Its authors included Robert Geddes, who went on to become dean of the architectural school at Princeton and who with Melvin Brecher, another member of the team, founded a major firm in Philadelphia; William Conklin, who founded the firm that designed the new town of Reston, Virginia; and Ian McHarg, a landscape architect who made major contributions to the analysis and use of the natural landscape in planning.

A quite different approach to the design of cities began in a rather surprising way at M.I.T. when a noted artist from Hungary joined the faculty. Gyorgy Kepes saw the whole world from small to large, and his talent included encouraging students to see it that way and to find their part in it. Kevin Lynch came from Chicago as a graduate student with some general ideas about architecture, nature, and planning.¹⁵ With his own students, he wrote *The Image of the City*, using a new system of notation and language developed with Kepes and still used for urban design analysis: paths, edges, nodes, districts and landmarks.¹⁶

Boston Renewal—1955 to 1965

From the Modern movement in Europe, two waves were propagated in Boston. The first, more dramatic and largely from Harvard, sprang from "La Ville Radieuse," Le Corbusier's visionary plan for Paris, with huge skyscraper "Unités" in a park. This conception was reinforced by the objective standards of the Bauhaus for high-rise buildings which could have light, air, and greenery so long as they were properly spaced. It was an idea seized upon by developers and public officials who found in it an intellectual and political justification for

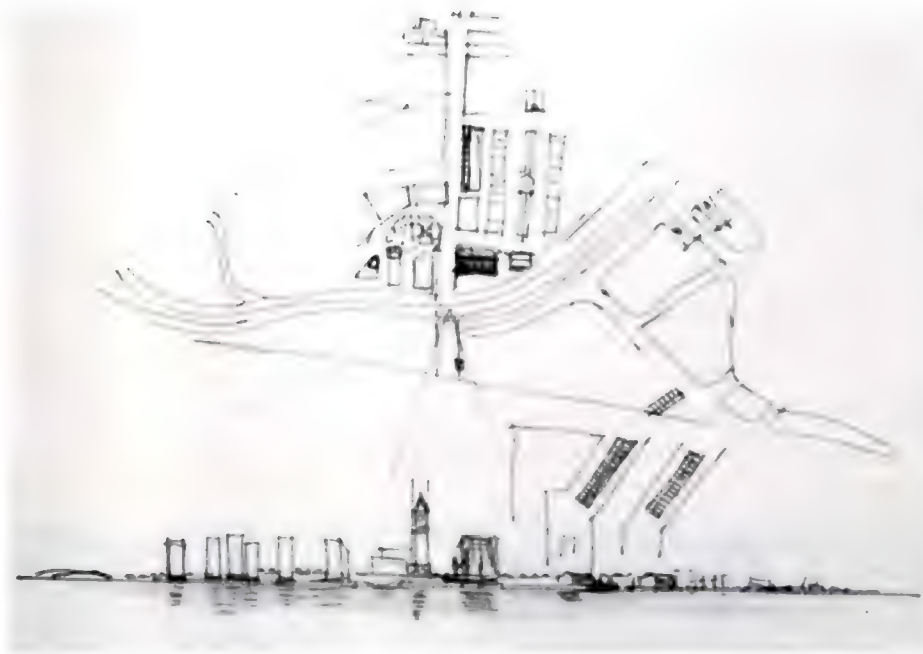
their desire to get the most rentable floor area for any given piece of land, exemplified by the high-rise apartments surrounded by (unusable) open space in New York City and elsewhere.

The second, quieter wave from M.I.T. was based on a human scale, perceptions at the pedestrian level, and a respect for historical continuity. It included exploration and testing of new technologies and materials such as solar power and plastics. But this second wave had to wait its turn until after some conspicuous failures of the first wave, such as the dynamiting of part of the Pruitt-Igoe high-rise housing in St. Louis, and the social upheaval created by the replacement of Boston's multi-ethnic West End by Charles River Park. The first wave appealed to aspiring architects and their teachers as the "strong statement" which frequently prevails, in an academic setting, over designs taking a deeper and longer view of the human being.

Josep Lluís Sert, a native of Barcelona, the son of a famous artist, a student of Le Corbusier, and an architect and city designer of international reputation, succeeded Walter Gropius as the spiritual leader of the Harvard Graduate School of Design in 1953. During his fifteen-year tenure, the term "urban design" gained its present currency, stemming from a series of conferences beginning in 1956. With Gropius's departure in 1952 and the earlier departure of the architect-planner G. Holmes Perkins, Harvard's planning department began to emphasize economic and social concepts, tending to neglect physical planning.¹⁷ At the same time, Sert placed greater emphasis on the aesthetic and purely architectural aspects of urban design, sometimes giving only rudimentary attention to economic and social considerations and putting less emphasis on the collaborative process as interdisciplinary experience.

In the early 1950s, after some forty years of economic recession, physical stagnation and two world wars, glimmers of a new Boston appeared with the first "reform" mayor, the "New Boston Committee," federal urban renewal legislation, and stirring in the business community. The Chamber of Commerce was out front politically while the economic influence of the businessmen's Coordinating Committee—"The Vault"—was in the background. A "blighted area" of the South End was cleared and rebuilt. The "blighted" West End was cleared and rebuilt in a first-wave manner by a development team headed by the chair of The New Boston Committee. A plan for what was to become the Prudential Center was designed by a team of Harvard faculty members, later changed and completed by the insurance company with a California architect of the first wave.

When the Boston Chamber of Commerce undertook to persuade the federal government to make their proposed office building the cornerstone of a new Government Center, they called on an M.I.T. team which had done the University Circle plan in Cleveland, including Anderson, Beckwith & Haible, architects; Adams, Howard and Greeley, planners; and John R. Myer and Kevin Lynch, urban designers. Although the plan changed, the objective was won. The Chamber next asked the Boston Society of Architects for a new design for the entire city, but its president, Edwin T. Steffian, suggested more realistically that the Chamber turn its attention to the downtown waterfront, which they did, once again calling on Lynch and Myer as consultants.¹⁸ They sponsored the preparation of a detailed design plan, two years in the making under the



Sketch for Boston's Downtown Waterfront by Robert S. Sturgis (1959). Early definition of Boston's urban form made possible the "High Spine" concept.

professional direction of Samuel C. "Sy" Mintz, and then passed it on to the new Boston Redevelopment Authority (B.R.A.) for implementation.

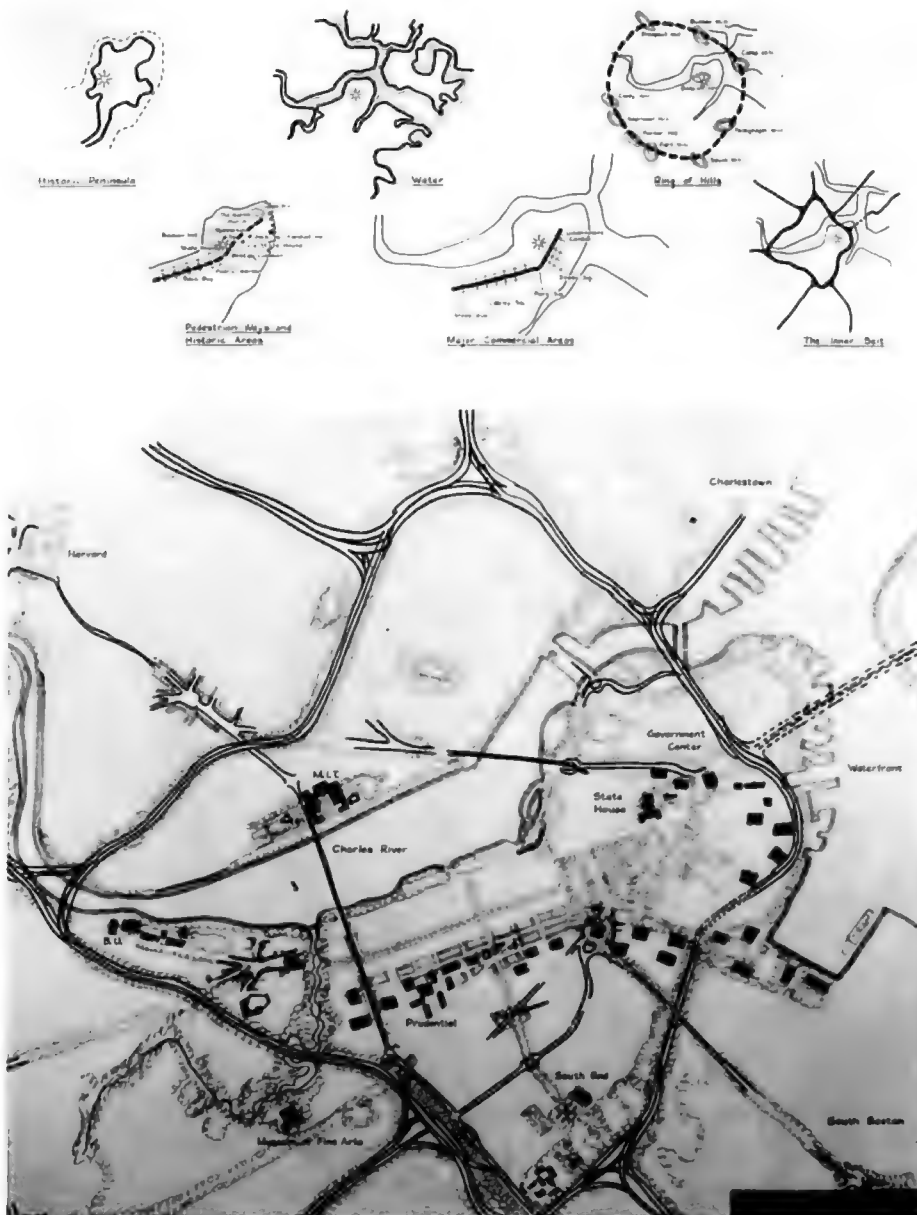
The year 1960 was a watershed in several ways, with active cooperation between the three architectural schools, the Boston Society of Architects, the business community and the new city government. John Collins was elected mayor and brought in Edward J. Logue to head the renewal program, which he did by combining planning and development in one agency under his direction.¹⁹ Logue then appointed one of Lynch's former students, David Crane of Philadelphia, to become director of urban design. This writer, who had continued his own Harvard experience by giving collaborative urban design problems to his students at the B.A.C., had just formed the Civic Design Committee of the Boston Society of Architects, including Myer and Lynch, and in the following year proposed "The Architects Plan for Boston," including sketches and a diagrammatic model. The proposal combined respect for the city's natural setting, its historic pattern of development and open space, with suggestions on how to deal with the new scale of highways and high buildings. It introduced the concept of the "High Spine," where major new buildings would be restricted to a narrow corridor from the Fenway to the Harbor, giving the city a recognizable form when seen from the various highway "gates" or from the various neighborhoods.

To design the Government Center master plan, Edward Logue brought in Ieoh Ming Pei, who had been educated at M.I.T. and Harvard and who had taught at Harvard, along with his partner, Henry N. Cobb, a native Bostonian and also an alumnus of Harvard's Graduate School of Design. Logue asked to be advised by a five-person committee which included Sert and Lawrence Anderson, deans of Harvard and M.I.T. respectively; Henry R. Shepley and Nelson W. Aldrich, who had been close to the profession and to the B.A.C.; and Hugh Stubbins, who had taught at all three.

Communicating the spirit of renewal also went in the other direction, toward

Boston's architectural schools. Here, the informal academic structure of the B.A.C. was particularly important as a communications tool, because through the volunteer faculty system almost any section of Boston became a candidate for an urban design studio problem, and members of Logue's enlarged B.R.A. staff were in demand as visiting studio critics. Members of Crane's urban design team became regular volunteer instructors at the B.A.C. With their help, Sy Mintz assigned housing development problems to the advanced classes there. This writer found that students at the B.A.C., who tended to have had more life experience than full-time students, were better prepared to do well at urban design problems in their early years than with technical problems of building construction.

One program of major public importance was called to the Civic Design Committee's attention by Professor Charles W. Eliot 2nd, the senior guardian



The Architect's Plan for Boston. The Civic Design Committee of the Boston Society of Architects, Robert S. Sturgis Chairman (1959-1962). The "High Spine" model aligned new tall building on an axis from the Fenway to Fort Point Channel, giving an image to the Boston Renaissance, while retaining the integrity of the historic city.

of Boston's oldest landscape and planning traditions, when he viewed our model of "The Architects' Plan:" "Where is the subway system?" It was of course underground and therefore not visible on the model. Properly chastened, we made it our next order of business. As we collected our thoughts, Governor Peabody was reorganizing the system. Again with Lynch and Myer, we had a report ready for the new Massachusetts Bay Transportation Authority with recommendations ranging from system layout to the design of stations and rolling stock. The new M.B.T.A. chairman accepted our design recommendations, the architects we recommended were hired, and the original guidelines have now, twenty-five years later, become a reality and a tradition.

The crest of the first wave in Boston urban design of the post-war epoch came in the 1960s with I. M. Pei's design for the new Government Center. Consistent with his preoccupation with and talent for the monumental, it included

John Hancock Tower (Henry Cobb and I. M. Pei, 1968–1975) and Trinity Church (H. H. Richardson, 1872–1877), Boston. Extraordinary controversy surrounded the siling of this sculptural skyscraper which initiated the "High Spine" concept, along a path that runs toward the peninsula from the Prudential Center; its visual quality has added power to the Boston skyline while its reflective glass has made it a "disappearing" building on Copley Square adjacent to H. H. Richardson's famed Trinity Church



a vast paved space as the foreground for the new city hall, diminishing historic Faneuil Hall (1742) in the background. This dramatic scheme clearly said "New Boston," but it began to make people think about what was important in the old Boston, to ask themselves what the "real" Boston was. The radical winning design for the new city hall by Kallmann and McKinnell, who had been teaching at Columbia University, was a brilliant response to Pei's monumental theme. But the earlier Lynch-Myer-Howard plan, in respecting the old Boston, had come closest to representing the real Boston. Twenty-five years later, there is now serious thought of reducing the scale of the windy plaza with the introduction of additional buildings.



Boston City Hall (Kallmann, McKinnell & Knowles, 1964–1968) and Plaza, Boston. James Lawrence devoted two years to organizing the nationwide competition for the new Boston City Hall, hoping that the design for Boston's new civic center would be the equal of Stockholm

The People Take Over—1965 to 1975

The drama of the Collins-Logue era, lasting only eight years, was a major educational experience in itself, not only for students of architecture and planning but also for the profession and for the general public. On the one hand, its momentum carried Boston forward for the next twenty years (a basic time module for city design), while on the other hand the constant discussion of the impacts of urban renewal raised the level of common knowledge.

The reactions to the “New Boston” of around 1970 coincided with the social upheavals in the civil rights movement, anti-Vietnam War sentiment and a new concern for the natural environment. *The Urban Villagers* by the sociologist Herbert Gans, decrying the bulldozing of the West End, inspired the foundation of Urban Planning Aid, whose organizers were creating their own upheavals in the schools at Harvard and M.I.T., and led to the idea of community design centers, a concept which still continues as part of the teaching program at the B.A.C. The Back Bay area of Boston, depopulated and physically deteriorating, organized an architectural design control commission with a major goal of preventing high-rise construction on Commonwealth Avenue. They succeeded.

Following the publication of Bainbridge Bunting’s *Houses of Boston’s Back Bay* (1967) and the exhibition “Back Bay: The City as a Work of Art” at the Museum of Fine Arts in the same year, and the founding of a new, active neighborhood organization, one of Logue’s successors supported the “High Spine” concept as the reasonable alternative. The Boston Preservation Alliance was formed in the 1970s to protest the demolition of the old Jordan Marsh Building on Washington Street and has gained in strength ever since. The North End Neighbors of the Waterfront project took an active and politically effective interest in the width of relocated Atlantic Avenue and the rules which the B.R.A. was establishing for new residential development. A mega-development proposal for Boston’s Park Square had been shot down earlier on environmental grounds. At about the same time, the Inner Belt and connecting radial highways (accepted as part of The Architects’ Plan) was halted, bringing to an end a twenty-year-old state highway policy. In important ways, the urban design process was being taken out of purely professional hands in order to incorporate public perceptions and the political process.

Students in the three design schools became part of the change, some actively so. Faculty members in the two university architectural schools, especially those of the first wave, tended to be defensive, but others tried to bridge the gaps. Harvard’s president was so upset with student and junior faculty activism at the Graduate School of Design that he appointed a business school professor, a non-architect, to succeed Dean Sert. M.I.T., already a custodian of the more moderate second wave point of view and with a well-equipped faculty, responded knowledgeably and directly to the environmental and social aspects of urban design. At the B.A.C., a new small-studio, multi-track curriculum tended to encourage individuality rather than collaboration. With its instructors coming from many other schools besides Harvard and M.I.T., the B.A.C. system was especially well-prepared to accommodate the philosophical changes in education that characterized these years. Its student population grew from 200 to 500 by 1972.

Boston Out Front—1975 to 1989

From the perspective of 1989, it appears that the Boston boom, generated in 1960 and given impetus by the confident and optimistic first wave of urban design theory, has begun to level off. A look back is in order, whether or not it may produce lessons for the future. Not all of the many changes of the past forty years have been the work of Boston architects, but almost all of them can be traced back to the particular phases of architectural education which were generated here. Clearly, significant influence on American architects originated in Europe, certainly in France and Germany but also with an awareness of work in Scandinavia, the Netherlands and England. As applied to Boston, however, urban design theory has been modified by its street patterns, by its traditional use of brick, by its land use constraints and by its political habits.

Urban Design Education

By its nature, urban design is as much political design as professional building and land planning design. The players are not only the trained professionals, but also the knowledgeable and involved public and the public officials they elect. Therefore it seems important that education be directed outside the architectural schools as well as within. The “second wave” has brought home to us all the importance of both faculty and students taking lessons from the public. Personal, aesthetic and intuitive design concepts by individual architects are the starting point for urban designs, but they are only the beginning.

5.3 EDUCATIONAL HIGHLIGHTS: THE NEW AND THE OLD

Frederick A. Stahl

Frederick A. Stahl, F.A.I.A. received an undergraduate degree in art from Dartmouth College, attending the Graduate School of Design at Harvard for one year and completed his architectural education at M.I.T. in 1955. After eighteen months study on a fellowship in England, he returned to Boston in the 1950s. He was one of the first architects to become concerned about problems of contextuality and historic preservation in the city, and was instrumental in saving both Old City Hall and the Faneuil Hall Markets from demolition.

I arrived in 1952 at the Graduate School of Design, from Hanover, where ties to Harvard were strong through Ted Hunter, the first Modern architect to teach a studio course at Dartmouth. Leaving an old Connecticut mill town for a career as a yacht designer, I had intended to study engineering, but was seduced by the outstanding Art Department faculty: Hugh Morrison, author of the first serious biography of Louis Sullivan, taught architectural history; Jerry Lathrop, painting; John Stearns, ancient art and architecture. Equally influential was H. Wentworth Eldredge’s planning course. Lacking firsthand experience of urban life I became an impassioned believer in the underlying unity of human expression, the Modern movement as defined by Sigfried Giedion and the culture of cities from the perspective of Lewis Mumford.²⁰

We Dartmouth transplants found the Graduate School of Design in a sorry state. Deeply seated conflict focused upon the roles of Dean Joseph Hudnut and Walter Gropius, had resulted in mass resignations of both leadership and faculty, leaving the school under manned and ill-prepared for our entering class. Although Josep Lluís Sert, who later became dean, presented his ed-

educational program in the spring of 1953, I took a walk down Massachusetts Avenue to number 77 and was welcomed into the fourth year at M.I.T.

The ethos of the M.I.T. School of Architecture derived from its almost total independence from the Institute, which had moved to Cambridge in 1916, leaving the School of Architecture and Planning in the Back Bay until the late 1930s. Equally important was the transition from the Beaux-Arts tradition under the leadership of Dean William W. Wurster, one of the most humane and regionally responsive of our modern architects. Central to the continuation of this tradition was the influence of Lawrence Anderson, who was really the spirit of the School. M.I.T. had developed strong ties to Europe, but not in terms of the conventional International Style. Alvar Aalto had been invited to do his only American work there, Steen Eiler Rasmussen lectured, Gunnar Asplund's work was exhibited. The faculty included Gyorgy Kepes in visual design, Paul Weidlinger in structures, Bob Newman in acoustics and other outstanding independent artists and professionals, all of whom shared a dedication to teaching and to students.

The fourth year at M.I.T. was for me more important for its broad exposure to the potential world of the arts and of urban life than for specific professional progress. The best of the studio critics was Ralph Rapson, who became my ideal of the "complete architect"—living on Beacon Hill, running (with his wife) the first modern home furnishings store, "Rapson's," a precursor of Design Research and Crate & Barrel; Ralph's precise and elegant work reflected taste and intelligence of the highest order.

In the winter term of 1955 I was admitted to the Master Studio, as the only New Englander amongst a dozen others from Tulsa, Seattle, Rome, Munich and India, several of whom had already been in independent practice. The cohesion and dynamism of that group was remarkable. In reaction to their dreary first term, a rebellious deputation waited upon Andy, requesting that the School import outstanding practitioners as studio critics. The following term we participated in studio problems with Paul Rudolph, Minoru Yamasaki, and John Johansen; Bucky Fuller moved into our lives for six weeks of non-stop discourse, taking his famous naps on his drafting table, a perfect fit.

Meanwhile, I spent a good deal of time looking into Boston, the Old West End and Scollay Square. I still see long vanished landmarks in that zone *sans-itaire*—the Old Howard, the Silver Dollar Bar, Charter Street, the wild melee of old business and older buildings that knit that area together with the North End. We watched the demolition for the Central Artery, when many fine Bulfinch-era commercial buildings bit the dust. For me, the great granite structures of Boston's nineteenth-century waterfront represented the strongest and most fitting architecture, expressing, as Giedion wrote, "impressive austerity" and, I thought, dignity and authenticity as well. My introduction to the Faneuil Hall Markets had come from both Giedion and Durgin Park. On a few occasions we found ourselves at the Boston Architectural Center on Somerset Street, a great baronial hall where architects unbent and we younger characters were welcomed particularly by Cass, Gourley, Hopkins and Strickland amongst others of the older generation from the real world.²¹

Returning to Boston in 1957 after a graduate fellowship in England at the Building Research Station brought a serious shock - the demolition of the West End was virtually complete, the Central Artery was open. The great examples

of post-war reconstruction in many European cities had been disregarded, and Boston was being eaten by the disciples of International Style urban planning, against whose radical surgery Mumford had argued so eloquently.

Urban Renewal (slum clearance by a different name) had begun to pump vast amounts of money into any municipality prepared to level its older neighborhoods, and Boston had bought into this in a big way. The next decade was to see mega-project after mega-project proposed by various agencies calling forth the rigorous opposition of urban dwellers in Boston and its surrounding inner suburbs. Suffice to say that I quickly learned that virtually all architects lived outside the city, and that no important bureaucrats were residents of Boston's old neighborhoods.

After nine months with Paul Rudolph in his little Church Street office, I took the plunge into private practice, but meager circumstances induced me to scout for supplementary income. This led to a studio instructorship at Wellesley College, as a supplement to John McAndrew's outstanding lecture courses in modern and medieval architecture.²² Toward the end of that academic year I was pressed into service to undertake both the lecture and studio elements of John's courses, which amounted to more than a full-time commitment. I hadn't consulted my Dartmouth course notes for five years, but something had to be done to support a tiny practice that wasn't going anywhere.

Conventional wisdom, (then universal), held that the old center of Boston was dead, but I and some others believed otherwise. I had seen especially convincing examples of new life in old city centers in major English, French and German cities. Identifying a site, we designed a prototype one million square foot office building and began shipping detailed information to a friend of mine in the real estate business in London. Communications eventually became active and, about a year later, the first representative of an English property company came to Boston. In 1961 serious work on what would be the State Street Bank began. The design was based upon a review of the evolution of high rise office building planning, needs of local office users and a desire to emulate the "impressive austerity" of the older masonry buildings of the waterfront district. Much attention was given to the problem of respecting existing street scale and texture in modeling a form which could successfully integrate a building of completely non-traditional height with its surroundings. Remarkably, the final design met all existing zoning requirements. Bill LeMessurier was a principal advisor and joint-venture partner in the project, and deserves much credit for the logical and orderly result.²³ The computer analysis of the steel frame was, we believe, the first undertaken in Boston. The project office at 80 Broad Street became the focus of my practice and in 1963, my wife and I purchased the William Washburn French Second Empire/Egyptian Revival house at 57 Hancock Street.

Unexpectedly the Hill became a proving ground for urban issues vital to Boston's survival as a livable city. From the first Historic District legislation of the mid-fifties, no permission to demolish any building in the area had been granted. Suddenly, a local architect/developer proposed to remove Richard Upjohn's John and Nathaniel Thayer residences on Mt. Vernon Street, abutting a Gothic Revival chapel by Ralph Adams Cram, on Chestnut Street. The community was deeply split, families divided and war was declared. I was engaged

by the opposition as "architectural counsel" in tandem with their legal counsel. For the first time in Boston, I believe, a case was prepared based upon proving the feasibility of converting the existing buildings with restoration of their exteriors, thus rendering demolition unnecessary. Hearings before the Architectural Commission grew to overflow the Old City Hall Council Chamber. Ultimately the appellant's case to demolish was "not proved" and the buildings were preserved, though much of the remarkable interior detail was savaged in a profusion of drywall. In the meantime, I had become much involved in the new preservation movement based upon pragmatic and strategic planning rather than sentiment alone.²⁴

My walks to and from work, between home on the North slope of Beacon Hill and the office on Lower Broad Street, took me through the Markets and the old Financial District every day. Many schemes were then brewing: the Government Center was being pushed hard by the Boston Redevelopment Authority (B.R.A.), while Frank Christian and the Chamber of Commerce had initiated studies on a waterfront redevelopment plan directed by Dan Ahern.



State Street Bank Building, Boston (F. A. Stahl, 1961). The State Street Bank Building introduced the tall building to post-World War II Boston, initiating the growth environment of the third quarter of the century. It was in fact a joint venture of 3 firms: Stahl Associates, Hugh Stubbins Associates, and Le Messurier Associates, with F. A. Stahl as chairman and chief designer.

in 1964 that general plan was adopted by the B.R.A., and one of the early actions involved the relocation of wholesalers from the old market district to a new facility south of downtown Boston. The congestion of semitrailers, refrigeration trucks, barrows and shouting produce purveyors began to diminish. Virtually all of the money and energy of the B.R.A., which rapidly became substantial, was devoted to the waterfront itself, on the harbor side of the elevated Central Artery. For want of any serious attention, the future of Alexander Parris's Faneuil Hall Market Buildings (1823–1825) was increasingly in doubt.

Concerns which surfaced in our Board meetings at the Society for the Preservation of New England Antiquities (S.P.N.E.A.) were reinforced by rumblings from the City Council in anticipation of a possible clearance of this critically situated five acre parcel. Acting on behalf of S.P.N.E.A., I approached Ed Logue to promote the study which had been alluded to in the Urban Renewal text. I was joined in this by Roger Webb, founder and President of Architectural Heritage Inc., a non-profit organization which had successfully accomplished several difficult preservation and re-use projects. In due course our two institutions were invited to undertake the study, but informed that only \$30,000 was available for it despite the many millions budgeted for the Waterfront Redevelopment. As a result, we and our consultants worked at cost and Roger raised charitable contributions to cover the shortfall. The commissioning of this study enabled the B.R.A. and the City Administration to buy time despite frequent public discussions of the potential of high rise office development on the site.

The study was a landmark of its kind. Its purpose was to find a redevelopment strategy capable of sustaining the exterior restoration of the more than forty original building units, by that time substantially altered, deteriorated or missing entirely. It included documentation of the history of the original development by Mayor Josiah Quincy and architect Alexander Parris in 1824–1826, urban design and planning proposals, physical condition and artifact surveys, engineering analysis, scope drawings and specifications for restoration and re-use, detailed cost estimates and a recommended administrative, legal, and financial plan of action. The study and proposals were presented to a selected audience at a reception of downtown businessmen at City Hall by invitation of Mayor White in 1968.

Acting on these recommendations, Hale Champion, then B.R.A. Director, applied for and received a Housing and Urban Development (H.U.D.) grant of over \$2 million for the exterior restoration and structural stabilization of North and South Market Streets. Shortly thereafter the City of Boston, supported by a grant from the Commonwealth, established a fund for over \$600,000 for a similar scope of work on the central, "Quincy" Market, building. Stahl Associates and Architectural Heritage, in joint venture, were engaged as architects for this work by the B.R.A. and the Public Facilities Department of the City.

Shortly after the presentation of the Market District study, Mayor Kevin White discussed the problem of the Old City Hall with Roger Webb. For some time the City Council had toyed with the sale of the land and building for private development; in fact, a survey conducted by the Real Estate Board to identify promising new development sites was said to include Old City Hall. Mayor White had already requested the advice of several "Blue Ribbon" business and professional leaders, to ascertain if they felt the building could be reno-

vated and continue in City use. He had been advised that this would not be economically viable. However, impressed by the thoroughness of our study of the Market District, White requested that Roger and I take a second look. We chaired a small group for this purpose and determined that renovation/restoration of the Old City Hall was a realistic possibility. To overcome the prior negative finding, we recommended that the building be offered on long-term lease for private redevelopment, rather than used by the City; this concept was supported by both Walter Whitehill and Monsignor Lally, then chairman of the B.R.A. Board. Assisted by John Bok, who had served as our legal advisor on the Market study, a plan was developed whereby the City conveyed Old City Hall to the B.R.A., thus obtaining an urban renewal credit. B.R.A. had the authority to enter into long-term lease agreements and our committee prepared the draft long-term lease. All of these provisions were later used to enable the redevelopment of the Market District, allowing the real estate to remain as public patrimony while a public purpose was implemented by the private developer.

Faneuil Hall and Quincy Market Buildings, Boston (Rehabilitation Proposal, F. A. Stahl, 1969; modified and executed by Benjamin Thompson, 1970–1976). The rehabilitation of the market district was one of the great economic success stories of historic preservation in America. The market district was nearly destroyed by urban renewal programs in the 1960s.



The publicity attendant on the Market District study and the successful preservation of Old City Hall was widespread, marking a shift in public opinion and establishing a watershed for preservation in Boston, which rapidly became the acknowledged national example of an old city capable of incorporating the best of its heritage into its future. One episode in the course of the City Hall Committee work aptly illustrates this shift in perception. Roger Webb met with the architect member of the "Blue Ribbon" group convened by the mayor, requesting access to their files and data. There were no files; one meeting had been held at which it had been decided that since the building was "ugly" it should not be preserved.

I had continued to teach throughout this period, having left Wellesley to take up a faculty position at Newton College of the Sacred Heart in 1960. My teaching gradually evolved into an urban awareness program as well, with field trips and seminars in many of Boston's neighborhoods.²⁵ In 1968 I was invited by Sandy Greenfield to become involved at the B.A.C. in a primary fashion, as one of a few paid, daytime studio critics. Sandy's innovations in this period formed the first steps in a process which led ultimately to the accredited equivalency of a B.A.C. professional education. In an institution as steeped in tradition as the B.A.C., and blessed with such broad participation at every level,



Park Street Church, Parish House addition, Park Street, Boston (Stahl Associates, 1974). A reductive, Miesian use of glass linked historic Park Street on the Boston Common with the Granary Burial Ground adjacent to Peter Banner's Park Street Church; an imaginative design enhances the old to create one of Boston's special oases.

any changes were potentially controversial. As one of the few core faculty at the time, I felt committed to participate in most of these discussions. I also found myself, on occasion, acting as a diplomatic interpreter between Sandy and Cass as we traversed the bumps in the road; change in the life of institutions had always been of great interest to me.

One studio project I recall from that period was a neighborhood survey and preservation planning study of the Roxbury Highlands neighborhood. Bob Rettig, then at the State Historic Preservation Office, and I selected Roxbury Highlands for its richness of architectural and urban development, its almost total neglect by professionals, and its growing community awareness and leadership. A substantial part of that B.A.C. effort was spent in learning how to be supportive of a neighborhood self-determination movement and in convincing its leaders that our involvement could be advantageous to their program. Our finished study accomplished these goals and has since been built upon by the Roxbury Action Program and has assisted the neighborhood in safeguarding its resources despite increasing real estate interest and activity over the years.

5.4 HARVARD AND M.I.T.: ONWARD FROM THE 1950s

Joseph Maybank

Joseph Maybank, F.A.I.A., president of Architectural Resources Cambridge, Inc., graduated from Harvard College (A.B., 1953) and M.I.T. (B.Arch., 1958). At both institutions, Gropius's Bauhaus principles were central to the architectural curriculum. Maybank's firm designed the Kennedy School of Government, its first major work for Harvard. It followed upon withdrawal of I. M. Pei's design for the entire complex, which was implemented in part at Columbia Point in Dorchester. The Cambridge component required environmental skills unanticipated in Maybank's earlier education. Architectural Resources Cambridge, Inc. has since been distinguished for creatively combining new design with heavily censured urban environments or with pre-existing structures.

As I look back on it now, it seems to me that my architectural education began with a block of wood. I was an undergraduate at Harvard in the fifties, majoring in architecture. These were the last of the years of the "Gropius Era" at Harvard—the period which brought his famous International Style principles to America. I never studied with Gropius during my student years, although I was later to work with him at The Architects Collaborative (T.A.C.). Gropius didn't teach in Harvard's undergraduate program, and I did my graduate work at M.I.T. But his influence, of course, was everywhere.

The block of wood appeared in the first session of Design I, the undergraduate class known as "the Bauhaus course." It was taught by Richard Filipowski and William Bagnal (they taught the same course at M.I.T., I discovered when I was a graduate student there). The first assignment was "to express the plastic quality of wood." I was thunderstruck: express the *plastic* quality of wood—what on *earth* did *that* mean? And, more important to an aspiring architect, what did it have to do with architecture? Wasn't architecture about form, structure, frozen music, and all those other heroic qualities?

I looked around to see what the other students were doing. Someone finally started in and soon we all attacked our blocks of wood with whatever tools we could find in the studio—saws, chisels, and mallets. I found out that this ordinary block of wood did indeed have "qualities." It could be planed, drilled,

whittled, chiseled. It could be cut up and explored in various ways. It had a grain and if you studied the grain, it suggested ways the block could be carved. Later, we discovered the plastic qualities of other materials—paper, clay, and plaster of paris, for example. It's hard to describe how exciting this was, how everything was considered a major discovery, which I imagine was the point.

Design I was a wonderful course, though all along I was inclined to regard it as some sort of enormous joke. It seemed so ridiculously unintellectual. I couldn't believe we were allowed to have all this fun and get academic credit for it. I loved it, and the things I loved about it—the energy of the studio, the effort of the group towards a common purpose, working with one's hands, the delights of learning to grow and be fascinated by the process, and yes, the fun of it all—have stayed with me. To some extent, my entire practice has been built around trying to recreate as much as possible the atmosphere of those student years.

Yet, I have to admit that it was some time before I began to understand what it was all about. Perhaps I was slower on the uptake than the others, but I was

The Beller Center for the Kennedy School of Government, Harvard University, Cambridge (Architectural Resources Cambridge, Inc., 1979). The problem created by the introduction of a large building in congested Cambridge was the center of longstanding confrontation. The solution, executed in finely laid, rich brick, is an abstraction of the form of the generic shapes of Harvard architecture.



a year out of M.I.T. before these lessons began to make sense. I was at T.A.C., working on the shadows in an elevation study—what we used to call a “push-pull” (the “push” being the receding parts of the facade, the “pull” being the parts that came towards you). It reminded me of an exercise I had done again and again under the direction of Gyorgy Kepes at M.I.T. Kepes had us glue bits of wood on a panel, and then photograph the shadows thrown by varying lighting. It had all seemed very abstract and impractical at the time.

Suddenly, in that drafting room at T.A.C., I realized you could do the same thing with a building. You could describe it entirely by casting shadows—you look at it as an abstract painting: line and color, light and shadow, solid and void. It was really a problem of *design*, and it wasn’t until that moment that I understood the reasons for Kepes’s exercises.

There was a kind of Bauhaus mantra in those days: “honesty.” It had to do, among other things, with the expression of certain kinds of materials. Those were the days of poured concrete, and one had to have a sense of the *nature* of those materials. It also had to do with structure. One could never *fake* structure: it had to be clearly expressed in the building. Ceilings were exposed, even if a pipe ran through them. Natural materials were chosen whenever possible using paint, usually white, only on the infill walls, with occasional accents of primary colors. This was part of the ethic of architecture as we knew it then.

As the years wore on, however, this ethic came under a certain kind of attack. For one thing, it seemed to be producing lots and lots of dreary, soulless buildings. For another, building codes and costs began to make this kind of honesty more and more difficult and expensive. Ironically, in order to express the true nature of the structure, it often became necessary to fake it. For example, one couldn’t show the real steel structure (now almost universally used because of its economy) because it had to be covered in fireproofing. So, in order to express “structure,” architects had to cover the real load-bearing members with other materials that didn’t have anything to do with holding up the building.

The days of cast-in-place concrete and load-bearing masonry were over: the age of sheetrock and hung ceilings had begun. Ugly slabs and messy structure requiring cladding produced a kind of “house of cards.” Hollow boxes implied structure while “real” beams and columns were in danger of disappearing behind the veneer.

Twenty-five years ago, who would have believed this? It seemed to violate every principle of honesty of expression and materials. What, after all, were the “plastic qualities” of sheetrock? This new architecture of veneer seemed to be about images—not literal images, but token images, even ironic images. Facades were facades again; a carefully composed face that the building turns toward the world.

One of the products of this new approach is the architectural style we now call “Post-Modernism.” Post-Modernism is partly a reaction to Modernism, to the routine, clichéd Modernism we began to see in the late 1960s, Modernism that had become just another style. It is also, I suppose, part of the natural evolution of styles of architecture. But it was also a necessary response to changes in building construction itself: to rising costs and energy concerns.

We had to rediscover the aesthetic of the past, partly on account of the amount of glass we could use. In the days before oil shortages, we could use limitless amounts of glass in a facade; now we are allowed only about twenty



Cabot Intercultural Centre, Tufts University, Medford (Architectural Resources Cambridge, Inc., 1982). The challenge of large construction in an already built up environment was met by a fine designer; the resulting building enhances and adapts Goddard Hall gymnasium to new use, and provides a matchless view of Boston, while anchoring the Tufts University quadrangle that was begun in 1853 with Ballou Hall by Gridley J. F. Bryant, Jr



Dolben Library, Mount Hermon School, Northfield (Architectural Resources Cambridge, Inc., 1988). Additions and expansions of earlier structures have often been required of Boston architects, thereby imparting knowledge of subtleties of design under these conditions through experience.

percent. We had to make solid walls and punch them with windows again. Codes required the cladding of steel inside and out. Veneers of brick and stone have become universal on the outside; sheetrock on the interior.

One of the positive things about sheetrock, by the way, is that we have had to rediscover the use of color. The “nature” of sheetrock seems to bring back a concern with surface color and the decorative treatment of walls. Once again, I am using Kepes’s training.

All this has really made life much more complicated. The design focus then was on how the interior was planned and contained in its envelope. Today the concern seems much more on external appearance and the shaping of rooms. Then the concentration was on the “flow” of interior spaces, how people moved, how the spaces functioned. Now the *image* of a building has to be shaped—pediments and profiles, a rhythm of windows instead of “voids,” creating a functioning whole. One also has to be very aware of allusion: allusion to the past, allusion to other buildings, allusion to historical and architectural context.

But in general I think the new constraints are providing wonderful and challenging opportunities. They have shaken us up, made us look for new ways of using the building materials of today and of being “honest,” both to the recent and the more distant past. Of course, there has been the usual amount of excess. But as a style or movement, if that’s what it is, it is part of an evolution, a professional evolution, or process that I find endlessly fascinating.

I suppose the trick is to preserve what is best of the priorities of the past decades and carry them into the next. Light and shadow, the plastic qualities of material, structure real and suggested—these will always be with us. How we use them as architects is something we continue to learn.

5.5 THE NEW BUILDING AT NEWBURY STREET

John R. Myer

John R. Myer, F.A.I.A. was the design architect for the first stage concept of the Government Center plan for Boston in the late 1950s. He won the competition for the Boston Architectural Center building at 320 Newbury Street in 1964. A native Bostonian, he received his B.Arch. degree from M.I.T., studying with Lawrence Anderson and Ralph Rapson, practiced subsequently in the office of Hugh Stubbins and has founded the firms Ashley/Myer, and Arrowstreet and currently is a member of Linea 5 in Boston. He continues his teaching on the faculty at M.I.T.

I remember our frame of mind in the fall of 1964, as we decided to enter the B.A.C. competition: we undertook it to win, not to explore a theoretical view. We were six young architects with just four years of practice together, and we were looking for good projects. The spirit of the time was for building, and in the new way—Modern. There was the sense that our fathers had done well and survived a lot, but the two decades of profound difficulty that surrounded our youth—the Depression and the War—required a fresh look. Though we were partially aware of conflicts that lay in the tenets of Modernism, the building for the B.A.C. was not the project in which to confront them. Conflicts were suppressed at that moment by our optimism about what Modernism could do.

The jury was composed of our teachers and heroes as well as other distinguished practitioners: Lawrence B. Anderson, head of Architecture, and Pietro



Jury with winning entry for the B.A.C. Building Competition, 320 Newbury Street, Boston (Ashley Myer & Associates, 1967). From left to right: Rapson, Cascieri, Anderson, Lawrence, LeMessurier, Belluschi, Thompson, Bogner and Sert. The B.A.C. Building at Newbury Street was the result of a nationwide competition with major figures judging hundreds of entries. The exterior assertiveness of the new building differentiated it from the Back Bay, but no material except concrete was ever considered. The building, as most other designs of the 1960s, incorporated the New Brutalist forms of Le Corbusier that also appear in the contemporaneous Boston City Hall.

Belluschi, dean of the School of Architecture and Planning, M.I.T.; Arcangelo Cascieri, dean of the B.A.C.; James Lawrence, president of the Boston Society of Architects; William LeMessurier, president of LeMessurier Associates, structural engineers; Ralph Rapson, dean of the School of Architecture, University of Minnesota; Josep Lluís Sert, dean and Benjamin Thompson, head of the Graduate School of Design at Harvard; and Walter Bogner, Professor of Architecture at the Graduate School of Design and advisor to the competition.

Our reading of them was that they too were more concerned with what Modernism could do than with its problems. The building was for an institution beloved by Boston architects, to be designed by architects who were selected by architects. The problem was all in the family and well understood. Why should our entry raise issues with Modernism to confound the jury?

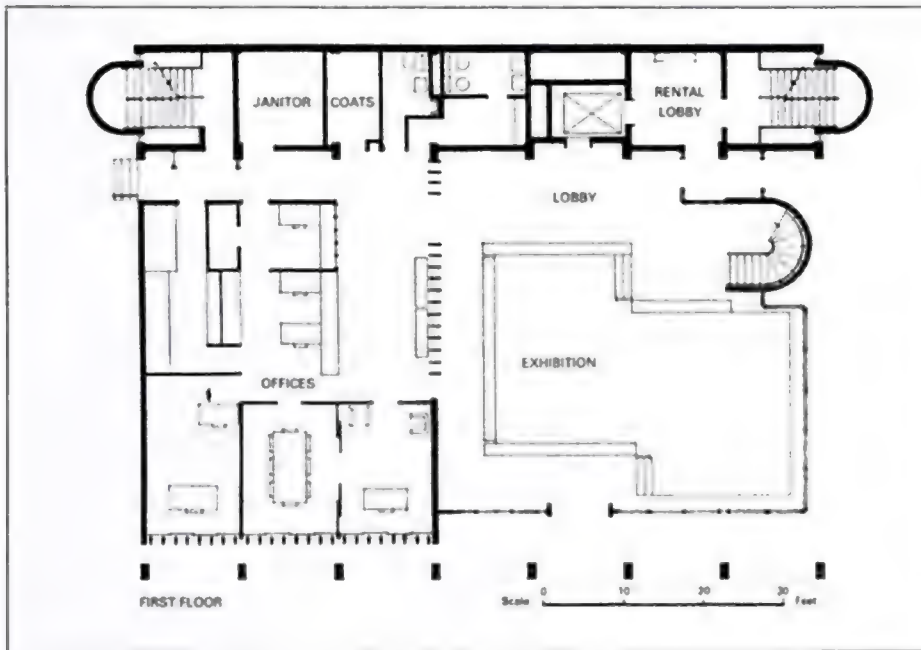
Soon issues like regionalism, contextualism, variable demand of users, historic connection and reference, formal maturity, and, increasingly, architecture's mythic role would call Modernism into question and fill our minds with difficulties and opportunities. They would become a kind of measure against which the new building could implicitly be measured.

For example, in our design the exposed structural frame was different from the Back Bay context of continuous fenestrated masonry facade. That scheme would come into question now, but then did not. In fact, it was virtually the only one we considered. It had an openness, lightness and a kind of athletic energy that seemed to us more contemporary and preferable to a fit with the traditional facade wall of the Back Bay. A statement by us at the time lifted out of the files: "We have sought not to depend on a sense of great weight to achieve a form of importance, but rather through the energy of the form to evoke a sense of liveness and contending".

Today our choice of building material would come into question. We would be concerned with continuities of color and texture with the old brick neighborhood, if not the actual material. At that time we saw concrete as the only choice. Nothing else would have met the needs of our exposed-frame scheme.

Elevation, Boston Architectural Center, 320 Newbury Street (Ashley Myer & Associates, 1964–1967). Selected in competition, the new building of the Boston Architectural Center replaced a stable. Its vigorous concrete forms were poured into place because there was not enough room on Newbury Street to handle precast components.





Plan, Boston Architectural Center, 320 Newbury Street. The plan of the building allowed open exhibition spaces on the first floor and interiors, with stairs on the Newbury Street elevation.

It was to have been precast concrete. We were told later that the jury saw it as the way of the future. But as it turned out, it was not to be the way for this building, which is poured in place. The site was too tight to maneuver the precast T-beams and columns into place.

The fact that we sought maximum height for the building, without regard for neighborhood heights, would also be a matter of concern now, but was not then. We assumed that in time new, higher buildings would replace the old three-story brick structures. We misjudged their importance to the Back Bay neighborhood. The context held, leaving the B.A.C. party wall exposed, it turned out, to the brush of a muralist.

However, some plan arrangements in the design seem as right today as the day they were conceived. The provision of flexible open space in the basement, which the B.A.C. immediately voted as an addition to the original program and budget, has proven to be highly useful over the years. The ground floor entry exhibit and administrative office spaces, coupled by the main stair to the lecture hall and meeting room above still seem good. So do the flexible loft spaces on floors 3, 4 and 5, which have been used in many ways by the B.A.C. and by rental tenants over the years.

The top floor courtyard has proven useful as expansion for the library, if not as a court. Installation of the old library, with its handsome old cabinetwork, from the original Boston Architectural Club building on Somerset Street was an excellent idea. The room has had many uses, including meetings of the B.A.C. and the Boston Society of Architects.

The team that joined with me to undertake the competition were Fletcher Ashley, Bob Goodman, Bill Hall, Dick Krauss, and Bob O'Neill. The group had great enthusiasm, all contributing their thought, energy and time, as our young firm could not afford to pay for it. Contributions came from everyone. I remember collaborating in a particularly happy way with Bob Goodman in the development of the overall design. Bill Hall's beautiful model is as together

today as it was then. I recall one work session in which Bob O'Neill suggested the curved stairwell at either end of the building's core and Fletcher Ashley's steady role of friendly criticism and support.

One Sunday evening in the early spring of 1965, the results of the competition were announced at the old B.A.C. building on the Newbury Street site. The place was filled on the first floor and basement by the models that the jury had been working over, as well as the anticipant authors. Walter Bogner read out the jury's thoughts to the hushed group of us, which took a bit of time. When he began to describe the winning design, it miraculously dawned on me that he was describing our scheme or one very like it. When he announced the winner, that rare thing happened—it was us!

But first we had to be deemed acceptable as architects to do the building. One test was a visit from a member of the B.A.C. competition committee at our office, which was a small studio in the back garden behind my house in Cambridge. When the Board Member finally found his way there, he seemed impressed by the non-downtown character, especially the grass growing in the sidewalks. (As I recall it, there was a rather handsome stand that year.) But this was not held against us, and they asked us to proceed with the work and meet with the Building Committee.

Oz Willauer, of New England Life and chairman of the Building Committee then informed us that we needed to get a building permit in three weeks in order to avoid a new zoning law which would go into effect in four weeks. The new law had requirements as to parking and height, as I recall, which would have profoundly altered the design. A building permit required that we produce a complete set of construction documents. Fletcher Ashley brought about the extraordinary achievement with his usual competence, and we then proceeded to develop the actual final details and working drawings at a proper pace.

The building team was to include Bill LeMessurier as a structural engineer and Sid Greenleaf as mechanical engineer. It was built by Volpe Construction, the low bidder at a cost of \$736,000. Many contributions to the building were made by manufacturers of building materials and other elements which did much to make the building what it is.²⁶ The construction system has some key features which should be noted. The building rests on Franki piles which spread their balled feet in the stratum of yellow clay and sand roughly twenty-five feet below street level. The poured-in-place concrete frame rests on the piles, with a fifty-five feet clear span post-tensioned T-beam, an assembly which is typical of most of the building, variations occurring on the second floor and roof.

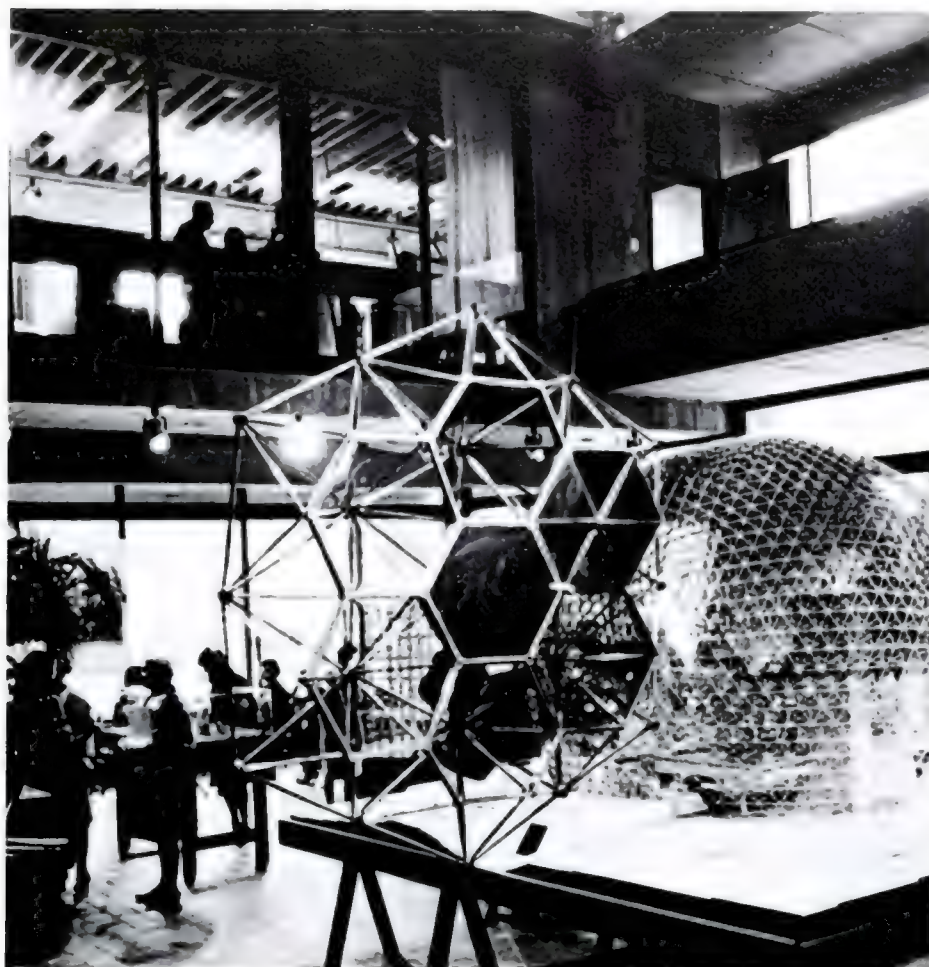
Finally, after a year of construction, the building was complete and ready for occupancy. The opening ceremonies began with the dedication on May 8 1966, and continued over the week with a symposium, a Beaux-Arts Ball and an alumni dinner, with many of the people who had made the building come into being as guests. A great many of the community's architects and architectural educators attended the dedication. Many of the jury were among the distinguished guests, who included Walter Gropius, Buckminster Fuller, Governor Volpe, whose Company built the building, and Boston's Mayor Collins. For the alumni dinner, I remember, the building was beautifully lit that warm spring evening with Bucky Fuller's giant model dome in the middle of the exhibition space.

The next great event was the arrival of the mural on the west wall in 1975.

It was an experience for the neighborhood, the building, the B.A.C., and for the architects of the building. It occurred at a time when murals were beginning to be seen on bare party walls in many cities. To my mind it was a positive frame of reference—in a sense, artists making the city belong to us.

When Peter Blake called me to ask me how I would feel about a mural and about Richard Haas doing it, it seemed reasonable. After all, the party wall was still exposed, since no buildings the height of the B.A.C. had in fact been built up to the west. But while I was still on the phone, I felt a vague uneasiness which I could not put my finger on. Looking back, I think it must have been that I had never actually been a party wall remedied by a mural before! What would it feel like?

When I first saw the Haas study for the wall, it seemed a wonderful image of an ideal architecture, a good match for the B.A.C. And when it was going up in 1975, there were stages when its images only partially covered the wall, leaving some of the frame and brick showing which seemed particularly felicitous. And when it was complete it was striking, but perhaps at this point a little too complete and too striking. There have been times since Post-Modernism when the flat, paintedness of the mural took on the superficiality of that style. I felt a concern not only about the mural, but what it might imply about the institution. Finally, at other times, I have felt the building had two different



Exhibition Area, Boston Architectural Center, 320 Newbury Street. The Geodesic Dome of Buckminster Fuller, who taught at M.I.T. in the 1950s, was on exhibition at the opening festivities. Fuller, Gropius and a national constituency were in attendance.



faces—or perhaps a face and a painted mask. This implies a lack of integration—or seems a bit schizophrenic—because these two are not different interpretations of the same inner character.

In closing, I should like to touch on the place the B.A.C. building takes in the context of my subsequent work. I have found myself thinking and saying that it was the last “building-as-object” I did. While this is not entirely true, it is true that in subsequent work I have increasingly sought a number of continuities not addressed in the B.A.C. They include continuities between building and context, landscape, buildings, or urban context; between building and users’ diverse needs; between building and its historic, cultural precedents and mythic roles.

Each of these has variably instructed my subsequent work. And as I look back twenty-five years to the B.A.C. design, it seems to me that despite Modernism’s limitations, it does not need to be disaggregated to permit these additional elements. It remains a powerful and open conceptual framework for work, and the B.A.C. remains an offspring of mine of which I am truly fond.

Massachusetts State Archives and Records Center, Columbia Point, Dorchester (Arrowstreet, Inc., 1978–1985). The Massachusetts State Archives and Records Center on Columbia Point was based on contextual and environmental premises, which differ from those of the competition requirements for the B.A.C. building a decade earlier; a move to horizontality echoes the site on Massachusetts Bay.

5.6 NEW EDUCATIONAL DIRECTIONS AT THE B.A.C.

Urs Gauchat

Urs Gauchat, A.I.A., principal of Gauchat Architects Inc., Planners & Architects, Cambridge, was born in Switzerland and has architectural degrees from the University of Sydney and Harvard. He was for many years an Associate Professor of Architecture at the Harvard Graduate School of Design. At the Boston Architectural Center, he taught for many years and served as president during the hectic period of curricular review, reorganization, and accreditation in the 1960s and 1970s.

There are times in the life of every organization when a major metamorphosis takes place. The era from 1970 to 1980 represents such a time in the life of the

Boston Architectural Center. The next few pages give a subjective account of the events of this period, interspersed with some personal observations.

The B.A.C. was founded one hundred years ago as an outgrowth of the architectural profession. Primarily an altruistic undertaking, it was meant to augment a student's practical experience in the architect's office with some formal academic knowledge.

This notion of what the school was intended to accomplish guided the school through the first eighty years of its existence. During that time, the school remained limited in size and produced very few graduates. Many students fell to attrition, while quite a number successfully passed their Architectural Registration Board exams before completing their B.A.C. education. The handful of students who did graduate were very special, indeed, and were rewarded not with a degree but with a B.A.C. Certificate. This Certificate represented formal recognition of incredible perseverance, diligence and ability. A piece of paper of great currency in Boston, the Certificate meant less and less, however, the further one moved from the city.

In 1966, the school moved from its old home on Beacon Hill to its present location on Newbury Street. The new building constituted a major affirmation of the Center and its mission. Despite the significant move, however, the school did not change in terms of its goals and educational philosophy. The student population remained at approximately two hundred, with most entering directly out of high school. The Center retained the feeling of the original, intimate architectural club, where just about everyone knew everyone else.

At that time in the evolution of the school, in the late 1960s, several factors suddenly conspired to generate a serious crisis. Although the crisis was profound, the school emerged with renewed vigor and a strong sense of direction. The nature of the crisis and the way in which it was resolved provide an interesting insight into the character of the Center and its many constituent parts.

One might well wonder what precipitated an unprecedented decade of change. There were a number of parallel developments, each for different reasons, throwing into question the very essence of the B.A.C. as a viable, alternative center for architectural education.

Foremost among the pressures on the Center was the extraordinary growth in the student body. The school grew from two hundred to six hundred students in less than five years. In addition, the nature of the student body and faculty changed dramatically. The Center suddenly required full-time administrators. The number of high school candidates to the B.A.C. remained constant, but additional students of a quite different profile were attracted in large numbers. Of these new students, some had already begun to pursue a tertiary education at another institution, while others came from a different professional background but wished to pursue their interest in architecture. The student body clearly changed. Although the B.A.C. was still serving high school students, they were no longer the majority.

The changes described, and especially the internal modifications brought about by the staggering growth in the student body, created a tense situation in which various constituencies were pitted against each other.

The first such constituency, comprised of the B.A.C. alumni who had enjoyed a different, much more intimate Center, largely shared a conviction that any

change was a threat to the very essence of the B.A.C. Looking back with nostalgia at their own time at the school and zealously guarding those memories, they felt that the school should revert to what it once had been. This was understandable but unrealistic, as it could not be accomplished without destroying the idea of an open door admissions policy, a policy crucial to the spirit of alternative education at the B.A.C.

The second constituency was the new and larger student body, which no longer had the same cohesiveness and shared background that had united earlier generations of students. Sheer numbers made it difficult to extend the former sense of camaraderie to the entire community. Although Dean Cascieri had provided an extraordinary amount of cohesion for decades through his personal knowledge of each student, the individual contact involved in creating such a relationship was no longer possible.

The third constituency was the volunteer faculty and the many other volunteers who sat on innumerable boards and committees. In many ways, this was the constituency with the most diverse objectives. Many of the volunteers were there because they had enjoyed a B.A.C. education themselves and were eager to give back some of what they had received. Others were attracted to the Center for very different reasons. The dramatic growth of the school allowed for much experimentation with little or no administrative control. Others were drawn to the school because it offered an opportunity to act as an agent of change and innovation in an exciting era of growth.

Finally, there was a small cadre of professionals, including Sandy Greenfield and Elsie Hurst, who regarded the B.A.C. as their main professional endeavor.²⁷ This fourth constituency did an excellent job of holding together a difficult group of highly contradictory elements. Despite its internal conflicts, the Center continued to function; bills were paid, students were educated, and volunteer faculty continued to offer their services to the Center. The administration, although small, was exceptionally capable and effective. A volunteer system, with its many committees and meetings, can often be redundant and inefficient, and certainly the B.A.C. was no exception. The professional administration began to tackle issues which had previously been the exclusive domain of volunteer committees. This represented a radical departure in the distribution of power and in the mode of decision-making. A more "objective" process began to replace some of the lengthy deliberation by volunteers united in their desire to participate in the life of the Center. The volunteers thus felt that their efforts were being usurped by a small, well-organized, yet less inherently concerned, staff.

The issues surrounding the Center and its commitment to providing quality, alternative architectural education finally reached a crisis point. Some wanted the school to return to the way it had been for more than eight decades, while others wished for further growth and expansion into different areas of education. One faction wanted a full-time faculty augmented by volunteers, while another wished the B.A.C. to become a degree-granting institution.

By priding itself on being outside the mainstream of architectural education, the B.A.C. provided a wide range of unique experiences, but at the same time left open the question of whether a B.A.C. education was equivalent to any other education. Despite the position of many that the B.A.C. experience was

far superior to the more conventional educational model, it left in many a lingering doubt as to whether, in fact, the B.A.C. graduate was as qualified an architect as the graduate of Harvard or M.I.T.

These questions were further exacerbated by the fact that most B.A.C. students worked as low-level office employees. B.A.C. students and employees were, and in some circles still are, regarded as malleable office material. As one observer rather cruelly put it, the mission of the B.A.C. is to provide office fodder.

As a result, the level of professional and personal ambition of the B.A.C. student and graduate was often below that of someone who had attended a full-time school. The sense of inferiority, justified or unjustified, became a by-product of the B.A.C. education. Many graduates shook this notion by going to other institutions of learning for further education or by excelling as a professional, thus disavowing themselves of any feeling of inferiority.

It became apparent that the Center could not continue to function without directly addressing some of these polarizing issues. The objectives of the various factions within the school appeared to be irreconcilable, and an air of mistrust and suspicion began to prevail. The Center was threatened, not so much by external changes, but by a divisiveness within. The Center had reached a watershed, and it was clear that a direction for the future had to be defined. A series of evolutionary changes had guided the Center from its inception to the momentous move to Newbury Street. This time, however, the brewing crisis required a conscious and deliberate articulation of goals that would inform future actions.

Although every one of the major constituencies played an essential role in the school, their respective points of view diverged dramatically. Feelings ran high, with each faction believing that their solution would "save the Center." Accreditation and degree granting were viewed suspiciously as processes by which, slowly but surely, the B.A.C. would lose any sense of identity. If the B.A.C. were to conform to the guidelines of accreditation and begin conferring degrees, then what would separate it from any other educational institution? Would the Center school simply degenerate into a second-rate architectural night school?

What emerged from this crisis was a unique series of events that generated the metamorphosis alluded to above. In a deliberative process which involved all constituencies, a strategy for the future was fashioned that reaffirmed the basic values of the school, yet allowed for adaptation to a set of circumstances never before faced.

At the board level, discussion was intense. We agreed upon the basic premise of the B.A.C. education, but, at the same time, we could see that the issues of accreditation and degree granting could not be ignored. After lengthy and fiery debate, it was decided that the B.A.C. did have some unique qualities which could not be compromised, regardless of whether the institution could be accredited or grant degrees. These four qualities, or "sacred cows" as they came to be known, were: the policy of open door admissions, a volunteer faculty, low tuition, and the work/study program. I made an absolute commitment, as president of the board, to battle for these principles in discussing terms for accreditation. In essence, it was decided that we would have to negotiate with the Massachusetts Board of Higher Education to keep the four "sacred cows."

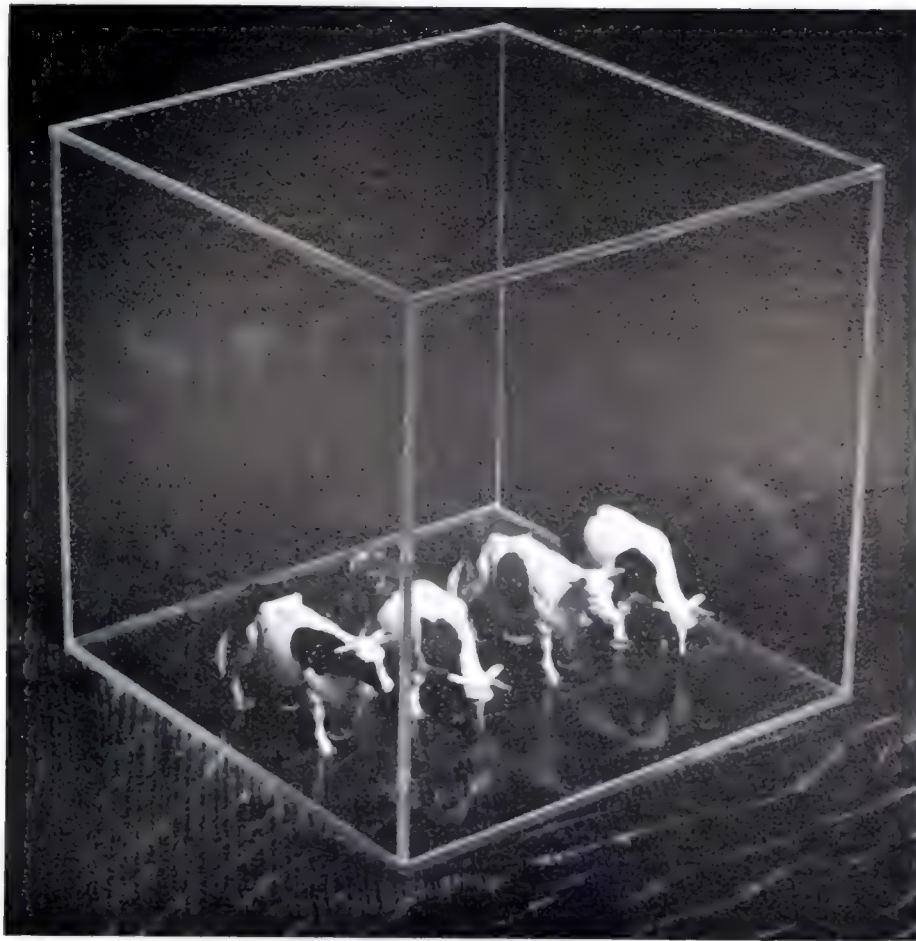
If this proved impossible, we would have to forego accreditation. The task seemed formidable.

The first big hurdle was, as expected, the first "sacred cow." The idea of open admissions was anathema to the Board of Higher Education. The Board insisted on uniform entrance qualifications. We resisted, however, any attempt to make previous academic prowess a prerequisite for admission to the Center School. As a compromise, it was decided to have open admissions and then gate people at intervals during their stay at the school. In this way, no student would be apprehensive about beginning a degree program at the school, but, at the same time, the school could maintain control of a student's performance by creating gates during their stay. Since this represented an outgrowth of a system already in existence, it seemed a viable solution. To this day, the school has segments. In order to proceed from one segment to the next, the student has to demonstrate sufficiently high grades and present her/his collective design work for review.

The second sacred cow was the idea of a volunteer faculty. Since its inception, the Center had been a place where one professional taught another. People from various offices and graduates from Harvard and M.I.T. still do volunteer their time to teach at the Center. Nothing held a student in class; there were no fears of reprisal for deciding that a teacher had nothing to offer and waiting until the next semester when there might be a more suitable teacher. This created a wonderfully symbiotic relationship between the teacher and student. Both had to want to engage in a student-teacher relationship for it to work. Often the students were the same age or older than the teacher. This situation provided a model for how to impart knowledge without the authoritative structure that has come to represent much of the traditional academy. For the student, it provided many role models. For the teacher, it provided an opportunity to articulate his or her own point of view, to formulate a philosophical and political framework in an experimental setting.

Another important aspect of a volunteer faculty was the fact that, due to small classes and the constant faculty turnover, there were large numbers of faculty members, thus providing a fluid and ever changing teaching staff whose only common denominator was an affection for the Center (usually personified by Dean Cascieri) and the will to teach someone something. As a result, the quality of teaching could vary considerably. Depending on the abilities and energies of each teacher, the experience was either mutually rewarding or, to be polite, it could be classified as a "failed experiment." In any case, no one was constrained by curricula or any other inhibition to educational experimentation. This produced a patchwork of sometimes brilliant learning experiences. Everyone, however, was bound together by the special climate created by a volunteer faculty.

This second "sacred cow" presented a major obstacle to curriculum development. A volunteer faculty, although well qualified, could not easily develop and manage an overall curriculum. It was therefore deemed necessary to divide the curriculum into a number of discreet academic areas that could each be managed and coordinated by a teacher also serving as a part-time administrator. In addition to the director of Education, there would be several area coordinators, each charged with channelling the ever-changing resources of a volunteer faculty into a coherent educational idea.



The "Sacred Cows" (Urs Gauchat, 1974). The four "Sacred Cows" of the B.A.C.'s educational philosophy were: free admission, low tuition, instruction by professional faculty and apprenticeship experience. These served as a rallying point for the accreditation program of the 1970s

The third sacred cow of low tuition was of no concern to anyone outside the B.A.C. and, therefore, presented no obstacle to our dealings with the Massachusetts Board of Higher Education.

The fourth sacred cow, work/study, was in some ways the most controversial. It seemed important to make sure that office experience was, in fact, an apprenticeship in architecture. Although the Center school was firmly committed to providing the practical experience of the work/study combination, it was also clear that some B.A.C. students were running complex projects while others were making coffee and acting as office boys. Furthermore, it seemed important to know more about the quality of the office experience before allowing students to graduate. In other words, if the work component of the B.A.C. education was to be an integral part of the Center school, then the school had an obligation to supervise the B.A.C. student throughout the office experience. This led to a further evolution in the work/study program whereby the B.A.C. would not only help place the student, but would track and supplement the office work as well.

As a corollary to the "study" portion of the work/study combination, one major area of concern was the Center school's lack of ability to provide instruction in the humanities as part of the curriculum. That the work component provided many experiences not available to a full-time architectural student was not deemed sufficient to make up for lack of coursework in the humanities.

To further complicate this issue, a significant portion of the B.A.C. population already had two or more years of college prior to their B.A.C. experience. What was needed was an opportunity for those students without significant post-secondary education to take a requisite number of courses in the humanities. It seemed important, however, not to make these courses in the humanities appear to be remedial in nature. In order to achieve this, it was decided to make reciprocal agreements with institutions that did provide a full complement of courses in the humanities. In exchange, their students could attend the courses given at the B.A.C.

Based on the program outlined above, and much to our astonishment, we were able to obtain both national accreditation by the N.A.A.B. and degree-granting power from the Commonwealth of Massachusetts. The B.A.C. was thus accepted by its peers and sister institutions as an equal member. Clearly the B.A.C. education was, and continues to be, radically different than other institutions in its programs and conceptual approach to architectural education. We were able, however, to maintain the unique character of the school while providing its students with the advantages derived from acceptance into the larger educational community.

What does all of this mean, then, in terms of the B.A.C. today and the larger issues surrounding architectural education? It means that the B.A.C. school, established as a local experiment, suddenly became an alternative model of how to teach and learn about architecture. It meant a transition from a won-

Mural on the west facade of the Boston Architectural Center, 320 Newbury Street (Richard Haas, 1975–1977). The introduction of Richard Haas's Classical mural painting to the exposed west wall of the B.A.C. building was initiated by Peter Blake, then director of the B.A.C., and has created one of the city's striking landmarks



derfully loose organization bound together by good faith and common affection for Dean Arcangelo Cascieri to a much larger, equally committed institution which remains true unto its founding principles and goals. Most importantly, perhaps, the story of the B.A.C. from 1970 to 1980 means that the alternative educational model, based on an affordable, rigorous give-and-take between professionals, can adapt itself and evolve through times of dramatic growth and change.

During this process of “metamorphosis,” it was remarkable to see the extent to which people were committed to the Center and to its goals. The eagerness and intensity with which everyone participated in this evolution was astonishing. Throughout the whole process, Dean Cascieri acted as the conscience and guiding light. It was clear at the time that many of the changes were not to his liking, but he understood and approved innovations and modifications, provided that the basic principles of the B.A.C. remained intact.

Above all, it was the first time that the ideas underlying the B.A.C. were articulated and turned into a curriculum. The process was fascinating to all those who were involved, for we were all aware that the very soul of the B.A.C. was at stake. Changing times mandated changes in policy, yet we felt compelled to stick to our principles and our beliefs. Although this period in the Center’s history is fascinating, it also extracted its toll in internal polarization and divisive debate. It is my hope that the course that has been set is flexible enough to accommodate incremental changes in the coming decades, lest we face a similarly cathartic experience in the future.

5.7 ARCANGELO CASCIERI: THE ORIGINAL SPIRIT PREVAILS

Margaret Henderson Floyd

Arcangelo Cascieri, sculptor, has been the spiritual leader of the Boston Architectural Center for more than fifty years. The institution has been inspired by both his quality as an artist and his skills as an educator. This sculptor and architect, who worked with Ralph Adams Cram and Maginnis & Walsh on architectural sculpture from the 1930s onward, has produced an extraordinary cadre of work himself, and has presided over both great crises of the B.A.C., bringing the institution from the Beaux-Arts through Modernism, intact and flourishing.

“There were many people involved in the 1930s and 1940s,” says Arcangelo Cascieri, “but it was a difficult time for the B.A.C. As an organization we were dependent upon the support of the profession, which was at that time split open. I wanted to move the curriculum into Modernism; I had been working with the students for ten years after I completed my own degree at the B.A.C. and eventually I was made Master of the *Atelier*. When in 1936 I was asked to be the head of the school I accepted of course, because teaching was always what I wanted to do. My own sculpture—that is rather irrelevant, because the teaching and architectural education was my avocation; I only earned my living as a sculptor.”²⁸

Although Cascieri has built a monument to himself through his devotion to teaching, his dismissal of his own sculpture is contradicted by the quality of his work. His skill was developed through years of study first with Ernesto Pellegrini in the Italian style, and then as apprentice to Johannes Kirschmayer, the Ger-

“A Municipal Railroad Station,” Pen, pencil and watercolor. (B.A.C. Student Thesis, Arcangelo Cascieri, c. 1925). His drawing talents developed through sculpture enabled Cascieri to accelerate his graduation at the B.A.C. by two years.

“An Entrance.” (Drawing, pen, pencil, and watercolor, Arcangelo Cascieri, 1923). The extraordinary talent of the B.A.C. dean set a standard for generations of aspiring architects. This drawing was done when Cascieri was a student in the Boston Architectural Club program and suggests his sculptural background



man Gothic woodcarver.²⁹ From Pellegrini Cascieri gained impeccable credentials, learning easily to handle the Classical forms of his native Italy. But, despite his Italian origin and natural assimilation of classicism, it was Kirschmayer whom he revered above all; "from him I learned the skills required for ecclesiastical sculpture, then widely in demand; of course that is how I made my living." Cascieri's talent was large. "When Kirschmayer phased out in the 1920s," says Cascieri, "opportunities came to me with Cram. I designed the capitals for the nave of the Cathedral of St. John the Divine in New York City—the working drawings the architects sent only roughed them in—and many figures for the west front, including that of Saint John the Divine himself, were left to me as the sculptor."³⁰ By the 1940s, after long affiliation with Cram, Cascieri received the first of many commissions from Maginnis & Walsh, with whom he collaborated on the Gothic buildings of Boston College (see Richmond, Chapter 4.4).

In 1922 the young sculptor had entered the B.A.C.: "I felt that the schools I had attended earlier, such as that at the Museum of Fine Arts, were not teaching the trade properly and that a more hands-on education was essential for the practicing artist. That commitment had been a cornerstone of the B.A.C. program from the start. I completed the course at the B.A.C. between 1922 and 1926—a record four years—my earlier training in drawing while apprenticing as a sculptor allowed me to move more quickly through the architectural program than the ordinary student." His talent as draughtsman won him a double promotion into the second year of the five-year program.

Among the drawings Cascieri submitted for matriculation at the B.A.C. was "An Entrance," executed in pen, pencil, inkwash and chalk, and detailed with some of the classical forms he learned with Pellegrini. The appropriateness of this theme runs through Cascieri's own association with the B.A.C.; the Center has provided him an entrance into teaching, and through teaching he has created an entrance into the profession for generations of students.³¹ "An Entrance" connects him with the B.A.C.'s long tradition as well: to the founders of the Boston Architectural Club, they were creating "an entrance." In a nineteenth-century spirit of noblesse oblige, the Club was envisioned not only as a social gathering place for the profession, but also to provide, through the Rotch Travelling Fellowship and its scholarship program, an entrance for the most talented of the young draughtsmen in Boston's architectural offices into the school at M.I.T. and later at Harvard.

Although Cascieri's sensitivity to the creative side of art led him to accept early the vision of Modernism, his peers from the anti-Modern side felt differently. It is a measure of his credibility as an artist, which in part was demonstrated by his Classical and Gothic production first as head and director of woodcarving at the W. F. Ross Studio in Cambridge 1923–1941, then as assistant director and director of the Schwamb Studio 1941–1952, that he was able to deal both with Gropius's aggressive Bauhaus constituency and also with those who called the Bauhaus creations "those matchstick buildings." But the process of transition from the Beaux-Arts methodology to Modernism was a process of gradual evolution for both M.I.T. and the B.A.C., while the Harvard program's turn to the left was surgically abrupt. Cascieri's sculpture not only provided the financial means for him to devote his life for more than fifty years

to the B.A.C., but gave him an unquestioned credibility. It was Cascieri who was somehow able to bind the wounds of the split architectural profession and carry the B.A.C. curriculum from the Beaux-Arts to Modernism. The most conservative architects of the 1930s could not doubt the credentials of a senior sculptor who had worked with Pellegrini and Kirschmayer, even if he was pushing modification of the B.A.C. program toward Modernism.³²

I had been in touch with both the schools all along, of course, taking classes there myself while a student at the B.A.C. Carlu and Halfner both came regularly to the



Interior, Cathedral of St. John the Divine, New York City (Heins & LaFarge, 1893–1911, Ralph Adams Cram, 1911–1942). St. John the Divine is the best known work of Boston's Ralph Adams Cram. The nave capitals and sculpture on the west front were designed and carved by Arcangelo Cascieri. Although most of Cascieri's work was ecclesiastical sculpture, collegiate design has traditionally provided a natural site for architectural sculpture and a continuation of the ornamental tradition of the past.

crits at the B.A.C. for the fourth- and the fifth-year students, whereas the architects did the crits for the first- through third-year students. And the weekend conjunctive competitions included all three schools. By 1930 or so I knew the curriculum needed to be changed, but I was not politically in a position to do it myself because I was dependent on the conservative members of the profession. So we went to Dean William Wurster when he first came to M.I.T. Gropius was interested in the B.A.C. and I admired Gropius as a philosopher and as a theorist, and I supported the collaborative method. But Gropius was so busy keeping the lid on, so to speak, at Harvard that he did not have much time to come over here. There was a deeply entrenched group of French professors over there who held up what he wanted to do. Eventually he cleaned house, but that was just as he left in 1952. But William Wurster did not have that problem at M.I.T., a more technically oriented institution, and he had full administrative backing.

"James Ford Clapp (then president of the Boston Architectural Club) and I drew up a proposal for a new, Modern curriculum" says Cascieri. "Immediately upon the arrival of William Wurster at M.I.T. in 1944, we appeared on his doorstep. Bill Wurster was a visionary; he had no use for the Ecole des Beaux-Arts, and little more for the Bauhaus, and immediately he indicated that he wanted nothing to do with our stuffy, old-fashioned school." Wurster assumed because the B.A.C.'s support included the conservative members of the profession, that the school was equally conservative, an initial error in judgement that was not uncommon for those unfamiliar with Boston institutions. But the quiet sculptor brought him up short: "perhaps this is not what you think, and perhaps you have been misinformed about our direction." Wurster reviewed the new curriculum proposal and before the conversation was through, the gate had been opened wide again, in typical Cascieri style, and a new entrance had been created. "Bill Wurster taught at the B.A.C. for two years himself and we changed the name to the Center. Then, of course, he sent over Ralph Rapson. It was Rapson working with the students that implemented the change."

Though his own work was far from the Bauhaus style, Cascieri saw that Gropius's vision as a teacher and as a philosopher was well geared to the educational needs of the generation of students that emerged after World War II. His dedication to the collaborative method also struck a chord in Cascieri, who anticipated the pragmatic reality of the future for practicing architects. Meanwhile, the vigorous, more widely based Modernism of M.I.T. with its focus on urban design, was a magnetic attraction for all. By the 1950s professional opposition to Modernism in Boston had begun to fade and Cascieri's *atelier* had moved miraculously into the twentieth century along with Harvard and M.I.T. It drew the best from both.³³

With the upheavals of the sixties and the consequent flood of students applying to the B.A.C.'s open program, the forces described by Urs Gauchat that would lead to a second curricular crisis, accreditation, were already in place. Caught between traditions and new requirements, it was the mark of the man that for the second time Cascieri brought the B.A.C. through dark times with its ideals and objectives intact. In the end, he was convinced that to move forward meant inevitable adjustments. "It was," says the dean, "a changing world. I had to explain to the students that by 1989 the A.C.S.A. would not allow any architect to practice without an architectural degree. The only choice was for change, for accreditation." So the extraordinary leadership of this gen-

"Flame of Life," bronze (Arcangelo Cascieri), Boston Architectural Center, 320 Newbury Street. Cascieri executed a number of abstract modern works in the 1940s and 1950s that were exhibited at the Museum of Fine Arts.



He provided an impetus for continuity and cohesion through that tumultuous decade. While the forced move from Somerset Street, initiated by the expansion of the state's Government Center, gave physical evidence of a new direction, B.A.C. alumni were apprehensive about changes from person-based judgements to the formal academic credentials expected for accreditation and, later, degree-granting. "Many people were involved," says Cascieri, "and somehow it worked." The flame of life was there.

6 ARCHITECTURAL EDUCATION AND BOSTON: THE CENTURY

Margaret Henderson Floyd

There had previously been opportunities to study architecture in the royal academies of fine arts, but it is worth remembering that the idea of putting a school of architecture in a university setting with close ties to applied sciences, is part of the industrial revolution. The pattern of American architectural education was established as a response to the new technology.¹ —Lawrence B. Anderson

The education of the architectural profession has changed markedly from the days when Langford Warren, chairman of the Harvard School of Architecture, described Boston's preference for English design. After 1885, the Ecole des Beaux-Arts system dominated American architectural education and French architects held the leading design faculty positions in educational programs throughout the country (Jacques Carlu and J. J. Haffner in Boston were only two examples of the trend); the prizes and reward system, the "way up" in the architectural profession, was channelled through the competitions of the Beaux-Arts Society in New York in which all of the schools, including the Boston Architectural Club, participated. The eventual breakdown of this system was spearheaded through Gropius's arrival in Boston, and leaders of the new Modernism were subsequently dispersed from Harvard throughout the country.

By the 1940s the future lay with the Modern movement, but its ultimate destination and the form of architectural education that would replace the Beaux-Arts system was still unclear. Lawrence Anderson, who lived through the turnover from the Beaux-Arts to the Modern at M.I.T., expressed his concern:

Today we may feel a sharp twinge of envy for those golden days. We can no longer share the simple optimism our predecessors felt about the future. William R. Ware, who established the course in architecture at M.I.T. and subsequently performed a similar role at Columbia University said in a lecture in 1865 that M.I.T. proposed to effect its objective "by means of technology; that is to say, by the discovery, collection and dissemination of technical knowledge,—a knowledge of the processes of the arts which experience and scientific inquiry most approve, of the best methods of attaining in each of the useful arts the best result. The best way of doing things is, in short, its end and aim." We have been trying this now for nearly a century, but the best way of doing things is still, I fear, beyond our grasp. Science refuses to stand still while we catch up.

The older wisdom of the western tradition counsels us not to forget the meaning of the word humanism in the acceleration of the Atomic Age. My message here is that as architects our resources should be deployed . . . to see to it that the technological imagination continues to focus where it belongs—on the reality of human existence.

As it now stands the humanist holds the key to the permanent values that go back to the Greeks, that are in danger of being stifled in the mass culture, while the scientist holds the key to the future. We cannot afford to have two warring camps.

Now architecture, insofar as it is a learned art, is in a peculiarly sensitive position between these camps. Here if anywhere we need both humanistic and scientific scholarship if the technological culture is to provide ultimately a superior kind of existence.²

Architectural education today allows increasingly for the return of historical sensibility, because Modernism has been encompassed and assimilated. The city of Boston, particularly when viewed in contrast with the rampant growth of New York, Chicago and Los Angeles, is characterized by integration in architecture. One example appeared in 1967 in the Back Bay with the plan of Araldo Cossutta (a student of Hugh Stubbins), chief designer in the I. M. Pei office for the new Christian Science Center. The first Christian Science Church by Chicago's Solon Beman (1883) and the huge Mother Church by Charles Brigham (1909–1911) add jewel-like forms to the cityscape since Cossutta's pool, edged in polished granite, has reflected them with Venetian splendor.³ Here is no compromise for contextuality.⁴

Sometimes, in harmonious juxtaposition, the new and old have come together in Boston. This interface was expressed in the B.A.C. building in 1976, when Richard Haas's architectural mural was painted on the west wall. It was Peter Blake, then director of the B.A.C., who suggested that the mural be commissioned.⁵ His book, *Form Follows Fiasco: Why Modern Architecture Hasn't Worked*, identified the need for a new direction. The addition of the Classical

Christian Science Center, Huntington Avenue (I. M. Pei, Araldo Cossutta, designing architect, 1968). Poetic Modern design enhanced the Mother Church with a reflecting pool of polished marble. Disparate buildings were brought together here into one of the finest public spaces in America.







(Facing page) Church Court, Beacon Street and Massachusetts Avenue, Boston (Graham Gund Associates, 1983). The condominium designs which emerge like Phoenix from the burned ruins of a church demonstrate the skill with which Boston architects have sought an environmental aesthetic for new design in an historic city.

Citicorp Center, New York, N.Y. (Hugh Stubbins, 1977). The regional and contextual sense of Boston architects has provided imagery worldwide. The Citicorp program incorporated the site for a new church, but also created a visual logo for the bank that has become one of New York City's most appropriate landmarks.

mural locks the New Brutalist building into the historic landscape of the Back Bay. As a structure combining the new and the old, the building well symbolizes what has become the next challenge for architecture.⁶ The tumult within its walls in the late 1960s and early 1970s brought new directions and eventual accreditation to the B.A.C. But the original ideals and the dreams of the founders of the Boston Architectural Club continue to be fulfilled: open admission to ensure education for all, the Center as a gathering place for Boston architects as volunteer instructors, minimal tuition, and an apprenticeship or office work experience. Through the B.A.C., the generations of the future can continue to find for themselves Arcangelo Cascieri's flame of life. The first educational vision for Modern architecture from Harvard has merged now with the great issues of urban design, which have been the programmatic focus at M.I.T. These merged sensibilities have come to distinguish the best work of Boston architects, wherever they build, whether it be Graham Gund's Church Court in Boston, Payette's Aga Kahn Medical College in Pakistan (Plate 8); Hugh Stubbins's Citicorp Center in New York City, provides as ideal an image as Jeremiah Eck's Waxman House in Rhode Island (Plate 5). The B.A.C. serves today as a crucible for diverse theories, architects, students and for creating a Boston architecture as it has for one hundred years.

NOTES

INTRODUCTION

1. Because Boston's intellectual climate enhanced the foundation of America's first School of Architecture at M.I.T. in 1867, and then perhaps its most influential one (in terms of graduates) in 1893 at Harvard, its educational history is unusually important.

2. The *American Architect and Building News* was the nation's first professional architectural periodical, which survived over an extended period. It began publication in Boston in 1876.

3. Riverside Church (1926) and the Cloisters (1934–1938), New York City, Allen & Collens; Stanford University (1888 and after) and the University of Chicago, Cobb & Frost from the office of Peabody & Stearns (1890), and She-

pley, Rutan & Coolidge (1903) finished by Cobb & Frost from the office of Peabody & Stearns; Carnegie Institute and Library (1891–1907), Pittsburgh, Longfellow, Alden & Harlow; U.S. Military Academy, West Point (1906–1914), Cathedral of St. John the Divine (1911–1942), New York, Ralph Adams Cram; Washington Cathedral (1907), Henry Vaughan and G. F. Bodley; Colonial Williamsburg (1927–1935), Perry, Shaw & Hepburn; Nebraska State Capitol, Lincoln (1922–26), and Balboa Park (1911–1915), San Diego, California, Bertram Grosvenor Goodhue; for Frederick Law Olmsted, see Chapter 2.

1 ARCHITECTURAL EDUCATION AND BOSTON TO 1899

1. William Robert Ware, *Outline of a Course of Architectural Instruction*, Paper presented to the Society of Arts of the Massachusetts Institute of Technology, 21 December, 1865 (Boston: John Wilson & Sons, 1866), p. 11. Courtesy of Lawrence Anderson.

2. Caroline Shillaber, *Massachusetts Institute of Technology School of Architecture and Planning 1861–1961: A Hundred Year Chronicle*, (Cambridge: M.I.T., 1963), pp. 4–5.

3. Margaret Henderson Floyd, "A Terra Cotta Cornerstone for Copley Square, Museum of Fine Arts, Boston 1870–1876 by Sturgis and Brigham," *Journal of the Society of Architectural Historians*, vol. 32, no. 2 (May, 1973) pp. 83–103.

4. Abbott L. Cummings, *Timber Framed Architecture of Massachusetts Bay: 1625–1725* (Cambridge: Harvard University Press, 1979), passim. The seventeenth-century Massachusetts house has been documented by Professor Abbott Cummings of Yale, earlier director of Boston's Society for the Preservation of New England Antiquities (S.P.N.E.A.), who has given us documented insight into the educational theory, philosophy and building techniques of the seventeenth century.

5. Bainbridge Bunting and Margaret Henderson Floyd, *Harvard: an Architectural History* (Cambridge: Harvard University Press, 1985), pp. 1–14.

6. Fiske Kimball, *Domestic Architecture of the American Colonies and the Early Republic*,

(New York: Metropolitan Museum of Art Lectures, 1922). In 1920 Fiske Kimball, Director of the Philadelphia Museum of Art, delivered a series of lectures at the Metropolitan Museum in New York which formed the basis for this best-selling book. The Colonial Revival was by no means solely a Boston phenomenon, but was generated and centered in New England.

7. B.A.C. Yearbook (Boston: Boston Architectural Club, 1923).

8. Isidor Richmond, "Going Modern," *AIA Quarterly*, 1936.

9. See Bunting and Floyd, *Harvard*, pp. 210–228.

10. Margaret Henderson Floyd, "Measured Drawings of the Hancock House by John Hubbard Sturgis: A Legacy to the Colonial Revival," Abbott Lowell Cummings, ed., *Architecture in Colonial Massachusetts* (Boston: Colonial Society of Massachusetts, 1979) pp. 87–112. Boston's largest private commissions relied on the vernacular housewright education of Boston's designers. Even governmental design was more parochial than such buildings at Williamsburg in Virginia. As the national capital, English funding underlay the construction of the Williamsburg colony always closely affiliated with the mother country. The curved baroque gables of the Old State House in Boston (1713) were a less scholarly and advanced architectural effort for the abrasive and unruly Puritan dissenters in the north.

11. Bunting and Floyd, *Harvard*, pp. 15–36.

The two private commissions, Faneuil Hall a meeting and marketplace for Boston donated by the wealthy Peter Faneuil and Holden Chapel at Harvard College, provided the only other designs of a mature nature in pre-Revolutionary Boston. John Smibert their architect, best known as a painter, had come to Boston earlier. As an Englishman and an artist familiar with building practice there, he was commissioned to design these two structures although his architectural education in England is still equivocal.

12. *Ibid.* The work of Peter Harrison brought Boston architecture to its highest level in the mid-eighteenth century. See also William H. Pierson, Jr., *American Buildings and their Architects*, vol. 1: *The Colonial and Neoclassical Styles* (New York: Doubleday & Co., 1970), pp. 142–150. Harvard Hall III replaced the worm-eaten and decaying Harvard Hall II, which stood earlier on the site.

13. *Ibid.*, pp. 240–268, and Harold Kirker, *The Architecture of Charles Bulfinch* (Cambridge: Harvard University Press, 1969).

14. See Walter Muir Whitehill, *Boston: A Topographical History* (Cambridge: Harvard University Press, 1959).

15. That is, the Massachusetts State House (1787–95), the three Harrison Gray Otis Houses on Cambridge Street (1796), Mt. Vernon Street (1800), and then Beacon Street (1806). See Pierson, Jr., *The Colonial and Neoclassical Styles*, pp. 240–268, and Harold Kirker, *The Architecture of Charles Bulfinch*, *passim*.

16. Pierson, *Colonial and Neoclassical Styles*, chapter VII, *passim*. The most notable infill process took place between Alexander Parris's Sears House (1816) and Bulfinch's Third Harrison Gray Otis House (1806) on Beacon Street where the protruding bow of the Harrison Gray Otis House is buried in the adjacent infill building, constructed on the site of its garden, and an addition has extended the Sears House (now the Somerset Club) to meet it. The United States Capitol had burned in the War of 1812.

17. John Summerson, *Architecture in Britain, 1530–1830* (Baltimore: Penguin Books, 1954). Whitehill, *Boston: A Topographical History*, discusses the South End developments of the 1850s.

18. Samuel McIntire was probably the finest of architect/housewrights. See Fiske Kimball, *Mr. Samuel McIntire, Carver of Salem*, (Portland, Me.: Southworth-Anthoensen Press, 1940).

19. For an overall view of Boston architects, see Talbot Hamlin, *Greek Revival Architects in America* (New York: Oxford University Press, 1944; reprint ed., New York: Dover Press, 1964), Chapter 5, *passim*. Another English architect, Peter Banner, briefly resident in Boston, designed the Park Street Church (1809) at the corner of the Boston Common, also adapting

the Neoclassical, Adamesque style of Britain to the New World.

20. Pierson, *Colonial and Neoclassical Styles*, chapter VI, *passim*. Asher Benjamin first met Bulfinch in Hartford where he had traveled to help supervise the design of the Connecticut State House in 1793.

21. Fiske Kimball, William Graves Perry, Arthur Shurcliff, "The Restoration of Colonial Williamsburg in Virginia," *The Architectural Record* 78 (Dec. 1935):6. From this same period in the 1930s comes the reconstructed drawing of Harvard Hall I, only one of many twentieth-century hypothetical reconstructions of Colonial buildings by Harold Shurtleff.

22. Daniel L. Schodek, *Landmarks in American Civil Engineering* (Cambridge: M.I.T. Press, 1987); Bethna A. Norton, "The Boston Naval Shipyard 1800–1974," *Bostonian Society Proceedings*, 1975. General Loammi Baldwin had also engineered the Middlesex Canal through his native Woburn, northwest of Boston, beginning in 1794. The Baldwin story is epochal in the history of American architecture. Major Boston architects of the first quarter of the century descended educationally from him via the apprenticeship system.

23. As was so well chronicled by Walter Whitehill in *Boston: A Topographical History*. See also Talbot Hamlin, *Greek Revival Architecture in America*, pp. 90–118.

24. Bates Lowry, *Building a National Image: Architectural Drawings for the American Democracy, 1789–1912* (New York: Walker & Company, 1985). Latrobe had been supervising the construction of government buildings in Washington at the turn of the nineteenth century. Boston's three later federal financial buildings were: Robert Peabody's Custom House Tower (1907–17); R. Clipston Sturgis's Federal Reserve Bank (1926), Hugh Stubbins's Federal Reserve Bank (1977).

25. Phoebe Stanton, *The Gothic Revival and American Church Architecture* (Baltimore: Johns Hopkins University Press, 1968). William H. Pierson, *American Buildings and their Architects*, vol. 2: *Technology and the Picturesque* (New York: Doubleday, 1978), pp. 149–205. Richard Upjohn spent five years in Boston in the office of Alexander Parris following his arrival from England. He was the founding President of the American Institute of Architects in 1867.

26. Jonathan Pearlman, "The Architecture of George Minot Dexter: Link from Bulfinch to the Back Bay." Undergraduate Honors Thesis, Dept. of Art History, Tufts University, 1980.

27. The footprint of Dexter's demolished square remains today in the curve of Cambridge Street and George Clough's huge Pemberton Square Courthouse which replaced it. After the Boston fire of 1872, when the residential areas of Boston were shifted to the Back Bay, Pemberton Square became the center for many important architectural offices.

28. In this city where comparatively few for-

eigners had settled, the first wave of immigration began in the 1840s but brought with it few foreign architects. The vernacular housewright system of building continued to be the norm, but these Boston architects of the mid-nineteenth century were joined by some fellows of larger repute. While Ammi B. Young and Isaiah Rogers sequentially succeeded Robert Mills as the architects of the Treasury in Washington, D.C. through the 1850s and 1860s, and thus being in direct line to the engineering training coming through Benjamin Latrobe and William Strickland in the middle Atlantic region, they also produced some work of a domestic nature, while the epoch of the Gothic Revival saw comparatively limited construction in Boston itself.

Longwood anticipated the better-known suburb in New Jersey by A. J. Davis, Uxwellyn Park see Pierson, *Technology and the Picturesque*, *American Buildings and Their Architects*, Vol. 2 (New York: Doubleday, 1978), pp. 422–427.

29. For Dexter's work in Rhode Island see *Buildings on Paper: Rhode Island Architectural Drawings 1825–1945*, William F. Jordy and Christopher Monkhouse, ed., (Providence, 1982), pp. 59, 60.

30. George Adams, *Adams's New Directory of the City of Boston* (Boston, 1846). Twenty architects are listed. None has foreign experience or academic training except Arthur Gilman. In 1848 Jean Lemoulnier from France is listed (at the same address as Gridley Bryant), and Noury and Launay in 1853. George Snell arrived from England in 1851, Paul Schulze from Germany in 1853. Estey is first listed in 1850, Richard Bond in 1853.

31. A *Catalogue of the Officers and Students of the University at Cambridge for the Academic Year 1847/1848 Second Term*, pp. 61–65. The first citation for the Lawrence Scientific School describes courses, faculty and objectives. The Italianate building, now destroyed, was designed by Richard Bond (1847) and extended by Ware and Van Brunt in 1871.

32. Walter Muir Whitehill, "A Centennial Sketch," in *Boston Society of Architects; The First Hundred Years 1867–1967*, ed. Marvin E. Goody and Robert P. Walsh (Boston: Boston Society of Architects, 1967), p. 71. Cabot's remarks were made at the closing of the American Institute of Architects's 11th Annual Meeting in Boston, October, 1877.

33. For bibliography see Margaret Henderson Floyd, "Edward Clarke Cabot," in *MacMillan Encyclopedia of Architects*, 4 vols. ed. Adolf K. Placzek, (New York, 1982), 1:363, 364.

34. See Robert B. MacKay, "Gridley J. F. Bryant, Jr. (1816–1899)" in *MacMillan Encyclopedia of Architects*, 1:315–316. This model was based ultimately on the centralized octagon of the Pentonville Prison on Dartmore. Bryant's prison designs were widely distributed through

America in the following decades.

35. The Deacon House by the French architect Jean Lemoulnier, who was in partnership with Bryant in 1848 in the South End, was adorned with the first mansardic "French" roof in Boston.

36. Margaret Henderson Floyd, "Arthur Gilman," *MacMillan Encyclopedia of Architects* 2:208–210.

37. Bainbridge Bunting, *Houses of Boston's Backbay* (Cambridge: Harvard University Press, 1967), pp. 361–397.

38. Harold J. Withey and Elsie Rathbun Whithey, *Biographical Dictionary of American Architects (deceased)* (Los Angeles: Hennessey & Ingalls, 1970), p. 563. George Snell (1820–1893) was born in London and, like Cabot was an aristocrat, having graduated from King's College Cambridge and worked with H. L. Elmes in England, possibly on his most famous work, St. George's Hall in Liverpool. He arrived in Boston in 1850 and practiced through the later part of the century as Snell and Gregerson, producing some of the most distinguished work in the Back Bay. Snell was one of the few architects with European education in Boston in the 1850s.

39. See James Lee Love, *Lawrence Scientific School in Harvard University* (Burlington: New Jersey, 1944).

40. For Ware, see J. A. Chewning, "William Robert Ware at M.I.T. and Columbia," *Journal of Architectural Education* 33 (November, 1979), pp. 25–29. See also J. A. Chewning Ph.D. dissertation, M.I.T., 1986.

41. William A. Coles, *Architecture and Society, The Essays of Henry Van Brunt* (Cambridge: Harvard University Press, 1969), Introduction, *passim*.

42. William Robert Ware, *Outline of a Course of Instruction*, p. 1.

43. *Ibid.*, p. 7.

44. This is George Gilbert Scott's St. Pancras Railroad Station in London (1867) and the brilliant competition for the Law Courts in London which was won by G. E. Street, although the losing competition designs, particularly those of William Burges, were equally influential in America.

45. For bibliography and Memorial Hall, see Bunting and Floyd, *Harvard*, pp. 86–92. For the Ecole des Beaux Arts, see Richard Chafee, "The Teaching of Architecture at the Ecole des Beaux Arts," in *The Architecture of the Ecole des Beaux Arts*, ed. Arthur Drexler, (New York: Museum of Modern Art, 1977), pp. 60–109.

46. See Jean Ames Follett, "The Business of Architecture: William Gibbons Preston and Architectural Professionalism in Boston during the Second Half of the 19th Century," (Ph.D. dissertation, Boston University, 1986).

47. This was to distinguish Boston's plan over the next fifty years in the form of the Emerald Necklace. The full impact of art made itself felt architecturally in a new phase with the

design of the Museum of Fine Arts in 1870 by the English-educated Bostonian John Hubbard Sturgis.

48. Walter Smith, *Art Education* (Boston: James R. Osgood, 1873), p. 15, quoting William Robert Ware. Walter Smith of London had earlier headed the outstanding Leeds School of Art in England. This book, one of the earliest in America on the subject, has the Museum of Fine Arts, Boston as a frontispiece and includes designs for art schools by Sturgis and Brigham.

49. See Walter Muir Whitehill, *Boston: A Topographical History*, passim.

50. Bunting, *Houses of Boston's Back Bay*, pp. 1–47.

51. See George Adams, *New Directory of the City of Boston*, for years in question.

52. *Yearbook of The Boston Architectural Club* (Boston, 1917). See also Whitehill, "Boston Society of Architects: A Centennial Sketch," pp. 17–18, and Floyd, "Cabot," in *Macmillan Encyclopedia of Architects*.

53. For the museum building program, see Floyd, "A Terra Cotta Cornerstone for Copley Square, Museum of Fine Arts, Boston," passim. See also Walter Muir Whitehill, *Museum of Fine Arts: A Centennial History*, 2 vols. (Cambridge: Harvard University Press, 1970), I:1–100.

54. Walter Smith, *Art Education*. Probably the most important primary source on the subject. This work, published during construction of the Boston Museum that opened in 1876, illustrates the South Kensington Museum, describes the British art education system and contains Art School designs by the Boston architects, Sturgis and Brigham, as well as an illustration of M.I.T. See also Foster Wygant, *Art in American Schools in the Nineteenth Century* (Cincinnati, Ohio: Interwood Press, 1983), passim.

55. John Ruskin, *Seven Lamps of Architecture* (London, 1849) and *Stones of Venice*, 3 vols. (London, 1851, 1853). These were the architectural bibles of the age, read widely by the public as well as by members of the profession.

56. Cummings and Sears's New Old South Church is close even in color to Ruskin's water color drawings in *Stones of Venice*. Cummings, despite his strictly technical education at Rensselaer, went on to write extensively on architecture. See Cynthia Zaitzevsky, "Cummings

and Sears," in *Macmillan Encyclopedia of Architects*, I, and Charles Cummings, "Architecture in Boston," in ed. Justin Winsor, *Boston, A Memorial History, 1630–1880*, 4 vols. (Boston: James R. Osgood, 1881), 4:465–488. Cummings gave both time and money to the Museum School.

57. For Richardson see Jeffrey K. Oschner, *H. H. Richardson: Complete Architectural Works* (Cambridge: MIT Press, 1982) and James F. O'Gorman, *H. H. Richardson: Architectural Forms for an American Society* (Chicago: University of Chicago Press, 1987).

58. Wheaton A. Holden, "The Peabody Touch: Peabody and Stearns of Boston, 1870–1917," *Journal of the Society of Architectural Historians*, vol. 32, no. 2, (May, 1973), pp. 114–131.

59. See Cynthia Zaitzevsky, *The Architecture of William Ralph Emerson, 1833–1917* (Cambridge: Fogg Museum of Art, Harvard University, 1969), passim.

60. For Preston, see Margaret Henderson Floyd, "W. G. Preston (1842–1910) at Naragansett Pier," in *Buildings on Paper: Rhode Island Architectural Drawings, 1825–1945*, ed. William F. Jordy and Christopher Monkhouse, (Providence, 1982), pp. 142–146, 230–231. See also James F. O'Gorman, *On the Boards: Drawings by Nineteenth Century Boston Architects* (Philadelphia: University of Pennsylvania Press, 1989), pp. 39–42, 91–98.

61. Mark Girouard, *Sweetness and Light: The "Queen Anne" Movement: 1860–1900* (Oxford: Oxford University Press, 1977), and Bunting, *Houses of Boston's Back Bay*.

62. William Robert Ware, *Outline of a Course of Architectural Instruction*, p. 7.

63. See Peabody Sketchbooks, Boston Architectural Center Memorial Library, 320 Newbury Street, Boston. Peabody's draughtsmanship was legendary. His use of the perspective sketch was notable throughout his career. See also Brad Edgerly, "Sketches of Robert Swain Peabody," *Dichotomy* (Detroit, 1983).

64. Wheaton Holden and Margaret Henderson Floyd, "Robert Swain Peabody," in *Macmillan Encyclopedia of Art* (London, in press, 1991). Also Holden and Floyd, "Peabody and Stearns," *Macmillan Encyclopedia of Architects*, 3:380–382.

2 EDUCATION AND LANDSCAPE ARCHITECTURE

1. The previous year in New York, a group of eleven landscape architects had formed the American Society of Landscape Architects, the first association of its kind for the profession. Several of the charter members were from the Boston area, including Olmsted, his brother John Charles Olmsted, and Warren H. Manning. Norman T. Newton, *Design on the Land: The Development of Landscape Architecture*

(Cambridge: Harvard University Press, 1971), pp. 335–336, 385–392.

2. I am grateful to Charles A. Hammond of Gore Place for the information in this paragraph. See also Charles A. Hammond, "Where the Arts and the Virtues Unite: Traditions of Country Life near Boston, 1638–1864," (Ph.D. Dissertation, Boston University, January 1982).

3. For the eighteenth-century development in architecture, see William H. Pierson, Jr., *American Buildings and Their Architects*, vol. 1: *The Colonial and Neoclassical Styles* (reprint ed., New York: Oxford University Press, 1986), pp. 140–144. Dearborn evidently designed or redesigned the grounds of his Roxbury estate “Brimley Place,” which he inherited from his father and about which little is known. As president of the newly formed (1829) Massachusetts Horticultural Society, Dearborn became deeply involved in designing the grounds of Mount Auburn Cemetery, which was originally meant to be combined with an experimental garden. Dr. Jacob Bigelow, to whom the design is often attributed, was responsible for introducing the concept of an extramural cemetery, for the design of Mount Auburn’s architectural structures (including the monumental Egyptian gateway) and for naming the roads and paths. In 1848, Dearborn laid out Forest Hills Cemetery in West Roxbury and is said to have advised on Edgell Grove Cemetery in Framingham. *History of the Massachusetts Horticultural Society, 1829–1878* (Boston, 1880), pp. 85–96. For Forest Hills Cemetery and Dearborn’s role in it, see W. A. Crafts, *Forest Hills Cemetery* (Roxbury, 1855), pp. 118–123. See also *Edgell Grove Cemetery, Framingham, Massachusetts, 1848–1938* (pamphlet, n.p., n.d.). For Dearborn, see *Dictionary of American Biography*, (New York: Scribner’s, 1930), 5:176–177.

4. *Life, Letters and Diary of Horatio Hollis Hunnewell* 3 vols. (Boston: Privately Printed, 1906), 1:186, 194; 3:25–185; and Henry Winthrop Sargent, Supplement to the Sixth Edition of A. J. Downing, *A Treatise on the Theory and Practice of Landscape Gardening* (New York: A. O. Moore & Co., 1859), pp. 442–447. (Downing died in 1852 and so had no personal knowledge of the Hunnewell place.) Modern accounts include Donald Wyman, “The Hunnewell Arboretum, 1852–1952,” *Arnoldia*, vol. 12, nos. 9–12 (December 12, 1952), pp. 61–84; Albert Fein, “A Garden for the Public: H. H. Hunnewell’s Rhododendron Show,” *Horticulture*, vol. 56, no. 7 (July 1978), pp. 52–55; and Alan Emmet, “Family Trees,” *House and Garden*, vol. 160, no. 11 (November 1988), pp. 194–199, 230. For Elvaston Castle, see *Gardens in Edwardian England* (reprint ed., Woodbridge, Suffolk, England: Antique Collectors’ Club, Ltd., 1985), pp. 20–26. Many of Hunnewell’s numerous children were also interested in landscape gardening, which they presumably learned from their father. The youngest, Henry Sargent Hunnewell, became a professional architect but was also an amateur landscape gardener. Although he had professional advice from Charles Eliot, H. S. Hunnewell was the master designer of his own magnificent estate, “The Cedars,” in Wellesley and Natick. Information on the Henry Sargent Hunnewell property comes from a research

paper done as a directed study by my student David McCoy (Tufts, 1988) and from my ongoing research on the estate.

5. Mariana G. Van Rensselaer, “A Suburban Country Place,” *The Century Magazine*, vol. 54, no. 1 (May 1897), pp. 3–17; S. B. Sutton, *Charles Sprague Sargent and the Arnold Arboretum* (Cambridge: Harvard University Press, 1970), pp. 17–19. As director of the Arnold Arboretum, Sargent was in a position to dispense both plants and landscape advice to owners of private estates. He apparently advised Henry Sargent Hunnewell (a relative) in this way. At the Bayard Cutting estate on Long Island, Olmsted designed the grounds but Sargent provided trees and probably also advised on the layout of the pinetum (records of the Arnold Arboretum, plans at Frederick Law Olmsted National Historic Site).

As a landscape advisor, there was a less positive side to Sargent. After Olmsted retired in 1895, Sargent was an informal consultant to the Boston Park Commission, and his suggestions (undoubtedly made with the best of intentions) resulted in radical changes in the Boston park plantations, that Olmsted had designed. See Cynthia Zaitzevsky, *Frederick Law Olmsted and the Boston Park System* (Cambridge: Harvard University Press, 1982), pp. 196–199.

Although in 1900 he was only six years in practice himself, Lowell had already demonstrated great ability in laying out gardens, but it is unlikely that he had extensive horticultural knowledge. Robeson Sargent has been a somewhat neglected figure as a landscape designer, probably because his career seems to have been completely subsumed in Lowell’s. Several residential designs, however, are attributed to him. One of his first projects was the landscaping of “Harbor Hill,” the Clarence H. Mackay Estate at Roslyn, Long Island, N.Y., done at about the same time (1900–1902) that the magnificent house by McKim, Mead and White was under construction. Another early work was the landscaping of the Bayard Thayer estate in Lancaster, Mass., completed by 1903. “Andrew Robeson Sargent, Class of 1900,” *Harvard Graduates’ Magazine* (n.p., December 1918; reprint ed.). For information on “Harbor Hill,” see *A Monograph of the Works of McKim, Mead and White, 1879–1915* (reprint ed., New York: Arno Press, 1977), p. 67, plates 166–170. Little is known of the details of any of Robeson Sargent’s projects.

6. Eleanor M. McPeck, “A Biographical Note and a Consideration of Four Major Private Gardens,” *Beatrix Farrand’s American Landscapes* (Sagaponack, N.Y.: Sagapress, Inc., 1985), pp. 16–22.

Armed with a letter of recommendation from Farrand, two young women from New York, Elizabeth Hoyt and Gladys Rice (later Mrs. Van Wyck Brooks) presented themselves to Sargent as candidates for the profession and

underwent rigorous training at the Arboretum. In 1919, Sargent befriended another young woman from New York, Susan Delano McKelvey, sister of architect William Adams Delano of Delano & Aldrich, and encouraged her to become a botanist. Gladys Brooks, *Boston and Return* (New York: Athenaeum, 1962), pp. 69–94; Edmund A. Schofield, "A Life Redeemed: Susan Delano McKelvey and the Arnold Arboretum," *Arnoldia*, vol. 47, no. 4 (Fall 1987), pp. 9–23. Mrs. Brooks is vague about dates, but she and Miss Hoyt seem to have been at the Arboretum around 1910. From there, they went to Paris, where Sargent arranged for them to see various gardens and meet Edith Wharton.

7. Caroline H. Dall, *In Memoriam: Alexander Wadsworth* (Washington, D.C., 1893), p. 10. The Wadsworth plans for Longwood and Cottage Farm are in the map collection of the Brookline Public Library. I am also grateful to Dr. Arthur Krim of Salve Regina College in Newport, R.I. for sharing with me his research on subdivisions by Alexander Wadsworth.

8. For Ernest W. Bowditch, see his unpublished reminiscences at the Essex Institute, Salem, MA and his obituary (*Milton Record*, May 25, 1918). For his Boston metropolitan park plan, see Zaitzevsky, *Olmsted and the Boston Park System*, pp. 39–41. For the recent material on McLean, I am grateful to Terry A. Bragg, Hospital Archivist. Throughout his career, Olmsted was perceived as a threat by some civil engineers, who seemed to feel that large projects involving major earth-moving and construction belonged to them by rights. The problem intensified when Olmsted began to get commissions in Boston and Brookline, where in addition he was seen as an interloper from out of town. A case in point was the subdivision of Aspinwall Hill in Brookline, in which Olmsted, Bowditch, Aspinwall & Lincoln were all involved. See Cynthia Zaitzevsky, "Frederick Law Olmsted in Brookline: A Preliminary Study of His Public Projects," *Proceedings of the Brookline Historical Society* (1975–1978), pp. 48–52.

9. For example, Ernest Bowditch had an informal partnership with Robert Morris Copeland until the latter's death in 1874. Author of a book on *Country Life* and columnist for the *Boston Daily Advertiser*, Copeland was a landscape gardener in the Downing tradition, who had a strong interest in public improvements. Among Copeland's most important plans were two unexecuted open space projects for Boston, to which Bowditch's plan owes much, and his design for the resort community of Oak Bluffs on Martha's Vineyard. Before joining forces with Bowditch, Copeland had been in partnership with Horace W. S. Cleveland, who moved to Chicago in 1869, where he oversaw the execution of some of Olmsted and Vaux's park plans and did projects of his own in Chicago and other parts of the Midwest. For the

Lee/Follen partnership, see *Boston City Directory*, 1868, p. 5, Advertising Section, p. 47. For Copeland, see his obituary *Boston Daily Advertiser*, March 30, 1874; Ellen Weiss, "Robert Morris Copeland's Plans for Oak Bluffs," *Journal of the Society of Architectural Historians*, vol. 34, no. 1 (March 1975), pp. 60–66; and Ellen Weiss, *City in the Woods: The Life and Design of an American Camp Meeting on Martha's Vineyard* (New York: Oxford University Press, 1987), pp. 76–109. For H. W. S. Cleveland, see Roy Lubove, introduction to H. W. S. Cleveland, *Landscape Architecture as Applied to the Wants of the West* (Pittsburgh: University of Pittsburgh Press, 1965).

10. For the Boston Public Garden, see Ballou's *Pictorial Drawing-Room Companion*, vol. 17, no. 23 (December 3, 1859), p. 359 and Zaitzevsky, *Olmsted and the Boston Park System*, pp. 33–35. For the Copley Square competition, see C. Howard Walker, *Statement of Plan for the Rearrangement of Copley Square* (Boston: Municipal Publishing Office, 1907).

11. For Platt, see Keith N. Morgan, *Charles A. Platt: The Artist as Architect* (Cambridge, Mass.: M.I.T. Press, 1985). The work of many of the early twentieth century architects mentioned is illustrated in Guy Lowell, *American Gardens* (Boston: Bates and Guild Co., 1902) and in Phillip H. Elwood, ed., *American Landscape Architecture* (New York: The Architectural Book Publishing Co., 1924).

12. The establishment of Olmsted's firm in Brookline is covered more fully in Zaitzevsky, *Olmsted and the Boston Park System*, pp. 127–135. For the dissolution of the Olmsted/Vaux partnership, see Laura Wood Roper, *FLO: A Biography of Frederick Law Olmsted* (Baltimore, Md.: Johns Hopkins University Press, 1973), pp. 342–343.

13. "John Charles Olmsted: A Minute on His Life and Service," *Transactions of the American Society of Landscape Architects*, vol. 2 (1909–1921), pp. 104–107; and Emanuel Tilmann Mische, "In Memoriam: John Charles Olmsted," *Parks and Recreation*, vol. 3 (April 1920), pp. 52–54. Arleyn Levee of Belmont is currently working on a biography of John Charles Olmsted and I am grateful to her for many insights. The relationship between Olmsted and John Charles Olmsted requires some explanation. Olmsted married his brother's widow; therefore, John was both his nephew and step-son, although they always referred to each other as father and son.

14. (Charles W. Eliot), *Charles Eliot: Landscape Architect* (Boston: Houghton, Mifflin, 1902), pp. 32–49. Notebooks of Charles Eliot, 1883–1884, Charles Eliot Collection, Loeb Library, Harvard Graduate School of Design. Professor Keith Morgan of Boston University is currently preparing a monograph on Charles Eliot.

15. Obituary of Henry Sargent Codman, *Garden and Forest*, vol. 6, no. 256 (January 18,

1893), p. 36; and *Boston Evening Transcript*, January 14, 1893. Codman's brother Phillip spent a similar period as an apprentice and assistant to Olmsted but died in 1896 at the age of 29. See *Garden and Forest*, vol. 9, no. 454 (November 4, 1896), p. 450. At the time of his death, Phillip Codman had been practicing independently in Boston for a year and was said to have already designed several important works. (No projects by Phillip Codman in his solo practice have thus far been identified).

16. (Eliot), *Charles Eliot*, pp. 204–239, 275–303, 316–350.

17. Sylvester Baxter, *Greater Boston: A Study for a Federalized Metropolis Comprising the City of Boston and the Surrounding Cities and Towns* (Boston, 1891), pp. 30–33. Quotation from Sylvester Baxter, "Thirty Years of Boston's Metropolitan Park System," *Boston Evening Transcript*, September 29, 1923, part 5, p. 1. For Baxter, see Zaitzevsky, *Olmsted and the Boston Park System*, pp. 122–123. I am currently working on a compilation of Baxter's writings with a biographical and critical introduction.

(Eliot), *Charles Eliot*, pp. 351–357, 380–415, 420–473, 487–545, 557–612, 668–689, 709–741; Metropolitan Park Commissioners, *Report of the Board*, (January 1893) (House no. 150), including *Report of the Secretary*, pp. 1–80 and *Report of the Landscape Architect*, pp. 82–112.

18. James F. O'Gorman, Introduction to *Henry Hobson Richardson and His Office: Selected Drawings* (Cambridge: Department of Printing and Graphic Arts, Harvard College Library, 1974), p. 10. James F. O'Gorman, *H. H. Richardson: Architectural Forms for an American Society* (Chicago: University of Chicago Press, 1987), p. 22. The French ateliers associated with the Ecole des Beaux-Arts had no exact parallel in the United States, with the possible exception of a Parisian inspired atelier in New York City established by Richard Morris Hunt. In Paris, the atelier was always separate from the architect's office.

19. Olmsted to George W. Curtis, August 22, 1891, Olmsted Papers, Library of Congress.

20. "Warren H. Manning, Landscape Designer," *Landscape Architecture*, vol. 28, no. 3 (April, 1938), pp. 148–149; Newton, *Design on the Land*, pp. 385–386. See also Stephen Conant, "Warren H. Manning: Landscape Architect and Democratic Planner," (M.A. Thesis, Tufts University, 1984).

Arthur A. Shurcliff, "Frederick Law Olmsted: Recollections," March 1952, pp. 3–6, unpublished typescript, copy deposited at Olmsted National Historic Site. Bremer W. Pond, "Arthur Asahel Shurcliff: A Biographical Minute," *Landscape Architecture*, vol. 48, no. 3 (April 1958), pp. 183–184. I am grateful to Elizabeth Hope Cushing, author of a dissertation in progress, "The Life and Work of Arthur Asahel Shurcliff, 1870–1957," (Ph.D. dissertation, Boston University) for much insight into Shur-

cliff's career. In 1930, Shurcliff changed his name from Shurtleff.

Frederick Law Olmsted, Jr., "Percival Gallagher," *Landscape Architecture*, vol. 24, no. 3 (April 1934), pp. 166–71; Frederick Law Olmsted Jr., "James Frederick Dawson, a Biographical Minute on His Life and Work," *Landscape Architecture*, vol. 32, no. 1 (October 1941), pp. 1–2. For Dawson's father and his horticultural siblings, see Sheila Connor Geary and B. June Hutchinson, "Mr. Dawson, Plantsman," *Arnoldia*, vol. 40, no. 2 (March/April 1980), pp. 50–75. For the Long Island estates designed by Gallagher and Dawson, see Cynthia Zaitzevsky, "Residential Commissions by the Olmsted Firm on Long Island," Society for the Preservation of New England Antiquities *Long Island Mansions and their Architects, 1860–1940*, (New York: W. W. Norton), in press.

Edward Clark Whiting and William Lyman Phillips, "Frederick Law Olmsted, 1870–1957. An Appreciation of the Man and His Achievements," *Landscape Architecture*, vol. 48, no. 3 (April 1958), pp. 144–157; Newton, *Design on the Land*, pp. 400–412.

Frederick G. Todd, a native of Concord, New Hampshire, apprenticed with the Olmsted firm between 1896 and 1900 and then went to Montreal where he spent the remainder of his career. See Peter Jacobs, "Frederick G. Todd and the Creation of Canada's Urban Landscape," *APT Bulletin*, vol. 15, no. 4 (1983), pp. 27–34.

21. Caroline Shillaber, *Massachusetts Institute of Technology School of Architecture and Planning, 1861–1961: A Hundred Year Chronicle* (Cambridge, Mass.: M.I.T. Press, 1963), pp. 41–43. Coffin, primarily a residential designer, is especially known for the landscaping of "Winterthur," the DuPont estate (now museum) in Wilmington, Delaware and several other private gardens in Wilmington and on Long Island. H. B. Warner, "Marian Cruger Coffin, A Biographical Minute," *Landscape Architecture*, vol. 47, no. 3 (April 1957), pp. 433–434. See also Nancy M. Fleming, "Money, Manure and Maintenance: The Life and Work of Marian C. Coffin, 1876–1957," Independent Project for the Radcliffe Seminars Landscape Design Program, spring 1988. Since M.I.T. had admitted women students from 1883, the landscape architecture option was open to them from the beginning. Other important women graduates were Mabel K. Babcock and Martha Brookes Hutcheson. For Martha Brookes Hutcheson, see Elisabeth Meade, "Martha Brookes Hutcheson, 1872–1959: A Biographical Minute," *Landscape Architecture*, vol. 50, no. 3 (Spring 1960), pp. 181–182. Another M.I.T. graduate was George E. Burnap, who, for his work in government landscape architecture in Washington, was awarded a degree from the Ecole des Hautes Etudes Urbaines, University of Paris. Before going to Washington, Burnap worked

in the Olmsted firm. He was also the author of *Parks, Their Design, Equipment and Use* (Philadelphia: J.B. Lippincott Co., 1915).

22. Newton, *Design on the Land*, pp. 335–336.

23. Harvard University, School of Landscape Architecture, *Annual Pamphlets, 1900–1930*; Eugene H. Bressler, "Chronological Summary: History of the Department of Landscape Architecture at Harvard University," May 1970, typescript in the Rare Book Room, Frances Loeb Library, Harvard. The *Annual Pamphlets* are also in the Loeb Rare Book Room. Shurcliff describes his Harvard teaching activities in " . . . Recollections," pp. 8–9.

24. Bremer W. Pond, "James Sturgis Pray: A Minute on His Life and Service," *Landscape Architecture*, vol. 20, no. 1 (October 1929), pp. 1–4.

25. Bremer W. Pond et al., "Henry Vincent Hubbard," *Landscape Architecture*, vol. 38, no. 2 (January 1948), pp. 46–57; Bressler, "Chronological Summary," pp. 3–7; Newton, *Design on the Land*, pp. 416, 424–426. The Department of Regional Planning functioned only sporadically after 1936 and was officially discontinued by 1940. The separation of city and regional planning from the parent discipline in the 1920s and its negative consequences is discussed in Albert Fein, "Report on the Profession of Landscape Architecture," *Landscape Architecture*, vol. 63, no. 1 (October 1972), pp. 37–38.

26. Dorothy May Anderson, *Women, Design and The Cambridge School* (West Lafayette, Ind.: PDA Publishers Corporation, 1980), pp. 20–21. Richard B. Kimball, "A Little Visit to Lowthorpe," *House Beautiful*, vol. 39, no. 4 (March 1916), pp. 111–113, xxvii.

27. Anderson, *Women, Design, and The Cambridge School*, pp. 1–43, 97–113, quote, 4. Henry A. Frost's memoirs of the Cambridge School, written in 1943, are quoted extensively in Chapters 1 and 2 of this book. Catherine R. Brown and Celia Newton Maddox, "Women and the Land: 'A Suitable Profession,'" *Landscape Architecture*, vol. 72, no. 3 (May 1982), pp. 64–69; Edward Clark Whiting, "Bremer Whidden Pond, A Biographical Minute," *Landscape Architecture*, vol. 50, no. 1 (Autumn 1959), pp. 47–48. In 1921, Pond became chairman of landscape architecture at Harvard but remained on the Board of Directors of the Cambridge School. An affiliation between the Cambridge School and Radcliffe College was explored but never implemented.

28. John Hancock, "John Nolen: The Background of a Pioneer Planner," *Journal of the American Institute of Planners*, vol. 26, no. 4

(November 1960), pp. 302–312; John L. Hancock, John Nolen, *Landscape Architect. Town, City and Regional Planner: A Bibliographical Record of Achievement* (Ithica, N.Y.: Cornell University Program in Urban and Regional Studies, September 1976); John L. Hancock, "John Nolen and the American City Planning Movement: A History of Culture Change and Community Response, 1900–1940" (Ph.D. Dissertation, University of Pennsylvania, 1964; University Microfilm); John Nolen, *New Towns for Old* (Boston: Marshall Jones Co., 1927), pp. 111–132; Mariemont, *The New Town "A National Exemplar"* (Cincinnati, Ohio: The Mariemont Co., 1925); Newton, *Design on the Land*, pp. 482–486; Robert A. M. Stern, ed., *The Anglo-American Suburb* (London: Architectural Design Profile, 1980), p. 81; Michael van Valkenburgh, *Built Landscapes: Gardens in the Northeast* (Brattleboro, Vt.: Brattleboro Museum and Art Center, 1984), pp. 21, 30–34; Robin Karson, "Fletcher Steele's Places to Dream," *Landscape Architecture*, vol. 78, no. 8 (December 1988), pp. 108–113; Fletcher Steele, "New Pioneering in Garden Design," *Landscape Architecture*, vol. 20, no. 3 (April 1930), pp. 158–177; Priscilla Urquiola, "Fletcher Steele, Landscape Architect," Independent Project for the Radcliffe Seminars Landscape Design Program, Spring 1987. A monograph on Steele by Robin Karson is due to be published in spring 1989.

The house designed by McKim, Mead & White at "Naumkeag" for Mabel Choate's parents, dates from 1885. A few years later, Nathan Barrett, a landscape architect from New York, laid out the northern and southern extremes of the grounds. Steele left the Barrett elements essentially undisturbed.

29. Boston Society of Landscape Architects, *Year Book for 1929* (Boston: B.S.L.A. Publication Committee, 1929). The depression seems to have interfered with further B.S.L.A. volumes of this type. The Boston Chapter, better known as the Boston Society of Landscape Architects, had been founded by Loring Underwood, a Harvard graduate who, like Henry Sargent Codman, had studied with Edouard André in Paris. See Henry Vincent Hubbard, "Loring Underwood," *Landscape Architecture*, vol. 20, no. 3 (April 1930), pp. 232–233; Loring Underwood, *The Garden and Its Accessories* (Boston: Little, Brown and Co., 1907); Robert Lyons, ed., *Gentlemen Photographers* (Boston: The Solio Foundation, 1987). I would also like to thank Jean L. Rosenberg, a student in my seminar on American landscape architecture at Radcliffe in spring 1987, whose thorough research has illuminated Underwood's career.

3 BOSTON ARCHITECTS: A TRAINED PROFESSION 1889–1930

1. H. Langford Warren, "The Year's Architecture," *Architectural Exhibition* (Boston: Bos-

ton Architectural Club, 1899) pp. 15–18.

2. Herbert Langford Warren, "The Study of

Architectural History and its Place in the Professional Curriculum," *The Architectural Quarterly of Harvard University*, vol. 1, no. 2. (June, 1912), pp. 37–44. See also Anthony Alforsin, "Toward a History of Teaching Architectural History: An Introduction to Herbert Langford Warren," *Journal of Architectural Education*, vol. 37, no. 1 (Fall, 1983), pp. 2–7. Although his father was American, Warren (1857–1917) was born in England, first coming to the United States in 1876. He took two years study at M.I.T. and then entered the office of H. H. Richardson for five years.

3. H. Winthrop Peirce, *The History of the School of the Museum of Fine Arts, Boston, 1876–1930* (Boston, Museum of Fine Arts, 1930), pp. 68–69. C. Howard Walker, who had trained in the Sturgis and Brigham office, taught the design class at the Museum School. By 1903 this became a separate department at the Museum School, having merged with the Lowell Institute Drawing School under Walker's direction.

4. Louise Hall Tharp, *Mrs. Jack* (Boston: Little Brown, 1967), passim. Mrs. Gardner's first house at 152 Beacon Street was enlarged in 1881 by John Hubbard Sturgis, her first art advisor. Many fragments of her collection were re-installed in "Fenway Court." Sturgis's Lawrence room at the Museum of Fine Arts had popularized the concept of assembling antique fragments in new construction. See Peirce, *The History of the Museum School*, passim.

5. Peirce, *History of the Museum School*, p. 10.

6. Shillaber, *M.I.T.*, p. 34. The activities of women at the World's Columbian Exhibition were visible. Actually two woman's buildings were planned. The first was designed by Minerva Parker and was of an Alhambresque style, closer to Louis Sullivan's Transportation Building than Sophia Hayden's second design. See Adelaide N. Baker, "The Isabella Idea," unpublished typescript, 1974.

7. Sam Bass Warner, *Streetcar Suburbs: The Process of Growth in Boston 1870–1900* (Cambridge, 1962). See also Douglass Shand Tucci, *Built in Boston: City and Suburb 1800–1950* (Boston: New York Graphic Society, 1978), pp. 73–130.

8. See Deborah Fulton, *The Architecture of J. Pickering Putnam*, (M.A. Thesis, Department of Art, Tufts University, 1980). As to the impact of German architectural education in Boston, there was little. The most notable German architect before the 1890s had been Paul Schulze, who designed the Appleton Chapel (1856) at Harvard before moving on to Washington D.C.

9. Bunting, *Houses of Boston's Back Bay*, pp. 63–165. The concept of uniform cornice lines for all buildings in the district, like its plan, derived from the reconstruction of Paris under Napoleon III and Baron Haussmann, that had

been implemented through the 1850s, just when Arthur Gilman visited the city. The Commonwealth restrictions in Boston allowed for a variety of bay windows, towers and porches to be introduced within the basic scheme, but not for variation in overall height.

10. "Minute on the Life and Services of Dean Herbert Langford Warren," *Harvard University Gazette* (1 December, 1917), pp. 45–46.

11. Bunting and Floyd, *Harvard*, pp. 98, 99, 117, 118. For Robinson Hall see Harvard University Lawrence Scientific School, *Announcement of the Department of Architecture* (Cambridge: Harvard University, 4 September, 1901), pp. 1–15. The number of students in 1901 was one hundred and eleven. McKim was then designing the gates and fence of Harvard Yard and had introduced classicism in the Boston Public Library (1887–1895).

12. See George Edgell, "The Schools of Architecture and Landscape Architecture 1894–1929," in *The Development of Harvard University Since the Inauguration of President Eliot 1869–1929*, Samuel Eliot Morison, ed. pp. 443–450.

13. Bunting and Floyd, *Harvard*, pp. 150–209, discusses the work of Charles Coolidge at Harvard in these years and also the impact of Longfellow.

14. Royal Barry Wills, "Alas Poor Boston, I Knew Her Well," c. 1960, personal papers of Royal Barry Wills (courtesy of Richard Wills).

15. Boston Architectural Center, "Glimpse Through a Closing Door, Boston, 1962–1963," pamphlet, B.A.C. Archives, manuscripts 9.1, n.p.

16. Clarence Blackall (1857–1942), the president-to-be, and one of Boston's most flamboyant and talented architects at the turn of the century, was a new sort of figure from an educational standpoint in Boston. Born in New York, he had obtained an architectural degree at the University of Illinois and also had attended the Ecole des Beaux-Arts before entering the office of Peabody and Stearns, from whence he won the Rotch Travelling Fellowship. He returned to Boston to practice in 1899 and would become particularly well known for his theaters, a synagogue in Brookline, and other more exotic designs. With Blackall a new epoch within the profession began. Blackall's education at the University of Illinois Urbana with Professor Nathan C. Ricker had tapped the other major source of architectural education in America at that period. The program at Urbana started in 1873. See Alan K. Laing, "Nathan C. Ricker and the Architectural Program at the University of Illinois" (Urbana: University of Illinois Press, 1973). See also Turpin C. Bannister, "Pioneering in Architectural Education, the First Collegiate Graduate in Architecture in the U.S.A.," *Journal of the A.I.A.* (July-August, 1953). I appreciate Professor Lawrence B. Anderson drawing this publication to my attention.

17. David Gregg was one of Boston's most sought after delineators. For information on classes and program, see in particular Secretary's Report for 1899–1900, "Scrapbook" No. 1, B.A.C. Archives.

18. *Ibid.* See also "Scrapbook" No. 1.

19. A floor plan of the rooms at 6 Hamilton Place is in the B.A.C. Archives. Descriptions of the rooms were published in the Boston newspapers 1888–1891. See "Scrapbook" No. 1, p. 18.

20. *Ibid.* For a short time the club was at Franklin Place, and considered rooms on Louisburg Square before moving to Somerset Street.

21. "Scrapbook" No. 1, membership lists of the B.A.C.

22. For description of the rooms, see Secretary's Report for 1899–1900, in "Scrapbook," No. 1, p. 97.

23. The door is carved with the date 1905. The attribution to Kirschmayer is visual only, made by his apprentice Arcangelo Cascieri. Correspondence and minutes substantiate the activities of R. Clipston Sturgis as secretary and president.

24. A drawing of elevation and plan of the fireplace was published in *The B.A.C. Yearbook*, 1920, signed by F. L. Witton. A winner of the Rotch Travelling Fellowship, Witton's foreign sketches were also reproduced. The room was dedicated to George Gordon Dellar, George Henry MacElligott and Wilfred E. O'Connor, Jr.

25. Meanwhile, the unavoidable problem of the break between the North and South Station in Boston meant that goods flowed more easily from the boot and shoe factories of southern Massachusetts and Rhode Island to the west through burgeoning Worcester.

26. The years between the Wars saw completion of Harvard's North and South Yards in the Colonial Revival style by H. H. Richardson's successor firm Shepley, Bulfinch, Richardson & Abbott, and some new building on the peninsula (described by Isidor Richmond Chapter 4.4).

27. For Church of the Advent see Margaret Henderson Floyd, "John Hubbard Sturgis: Architect of the Advent (1875–1888)," *The Beacon* vol. 6, no. 6 (Boston: Church of the Advent, Easter, 1988), pp. 22–43.

28. Correspondence of the B.A.C., particularly that of Sturgis, confirms interaction with other architectural clubs in St. Louis, New York, Pittsburgh, Detroit, Philadelphia, Toledo, Chicago and in 1899, the Architectural League of New York, the National Sculpture Society and the Society of Mural Painters. Exhibition catalogues were exchanged and architectural schools were included nationwide. See B.A.C. Archives. See also Goody & Walsh, *Boston Society of Architects*, for the national offices of members.

29. Douglass Shand Tucci, "Ralph Adams

Cram," *Macmillan Encyclopedia of Architects*, 1:471–474.

30. Gustav Stickley *Craftsman Homes: Architecture and Furnishings of the American Arts and Crafts Movement* (1909, reprint ed. New York: Dover, 1979). See also Beverly Brandt, "The Essential Link: Boston Architects and the Society of Arts and Crafts," *Tiller* vol. 2, no. 1 (Sept.–Oct. 1983).

31. Bunting and Floyd, *Harvard*. See also *Yearbook*, Boston Architectural Club (Boston, 1911), *Yearbook*, Boston Architectural Club (Boston, 1912), "A Modern Department Store," *Architectural Record* 29 (March, 1911); "The New Filenes Store Building, Boston, Mass.," *The Brickbuilder*, 21 (September, 1912). Steven Meyer of Tufts University provided research assistance on the Filene's building. Daniel Burnham worked with McKim on the MacMillan Plan for Washington, D.C. and on several unsuccessful attempts to design a new axial alignment for the Harvard campus.

32. Planning concerns were becoming central in Boston. See Whitehill, "A Centennial Sketch" in *Boston Society of Architects*, ed. Goody & Walsh, pp. 52–70 for Peabody's planning activities. See also W. J. Parker (secretary of the B.A.C.) to Charles M. Moore, 20 February, 1908. Here Peabody has been invited to speak as chairman of the Committee on Municipal Improvements of the B.S.A. As early as the *Exhibition Catalogue* of 1899 the B.A.C. had published C. Howard Walker, "Laws Governing Architecture in Relation to the Growth of Cities," pp. 8–14.

33. Margaret Henderson Floyd, *The Custom House Tower*, Historic Structures Report for the Beal Companies, (Boston, July, 1986). The Custom House tower was structurally innovative at its time of construction. Peabody's engineer partner, Stearns, did not provide all the design and supervision.

34. Cynthia and Nikita Zaitzevsky, Christine Carvajal and Calvin Opitz, *Elevated Structures of the Former Boston Elevated Railway Company, Rapid Transit Line*, Boston, Mass. (Washington, D.C.: Historic American Engineering Record Report, 1983). See also Margaret Henderson Floyd, *Longfellow, Alden and Harlow: Architecture After Richardson*, Boston and Pittsburgh, manuscript in process.

35. Characteristically, however, Boston architects moved between the Edwardian Baroque and the Neo-Gothic style with ease in these years before World War I. In the work of both Cram and Clipston Sturgis are excellent examples of both. The Perkins Institution and Massachusetts School for the Blind (1912) in Watertown is the largest and finest remaining local work of Clipston Sturgis in the Gothic mode, while he contemporaneously designed the Jeffersonian, American Antiquarian Society in burgeoning Worcester. Cram's Gothic churches were legendary throughout the

country. All Saints Church in Brookline (1894–1926) was published in 1899 in the B.A.C. Yearbook. He also designed Boston's Second

Church on Beacon Street in a Colonial Revival style.

4 THE CRISIS OF MODERNISM IN ARCHITECTURAL EDUCATION: 1919–1959

1. Walter Gropius, *The New Architecture and the Bauhaus*, (New York, Museum of Modern Art, 1936). Much familiar laudatory material has been published over the years on the career and impact of Gropius. For a (negative) analysis of program at Harvard see Klaus Herdeg, *The Decorated Diagram: Harvard Architecture and the Failure of the Bauhaus Legacy* (Cambridge: M.I.T. Press, 1983).

2. Bunting and Floyd, *Harvard*, Chapter 9, passim. Conant was a chemist, who had spent the early twenties observing the German chemical corporations and who maintained strong ties to German technology. Gropius was but one of many European intellectuals invited to Harvard.

3. Reginald Isaacs, "Joseph Fairman Hudnut," in *Macmillan Encyclopedia of Architects*, 2:435. Hudnut was a key figure in architectural education in Boston, publishing many books on architecture. Leaving Columbia to become Dean at Harvard in 1937, he wrote the introduction to *The New Architecture and the Bauhaus* and sponsored Gropius's appointment. Disagreeing primarily on the role of historical study and urban design in architectural education, the two left Harvard 1952–1953. Hudnut established his course on cities at Bowdoin College in Maine and then taught at M.I.T. for some years. See Chapter 4.1 Coolidge.

4. Coolidge, Shepley, Bullfinch & Abbott produced a number of excellent early Modern buildings in Boston beginning in the late 1930s; for example the BB Chemical Building Cambridge (1937). See Stubbins Chapter 4.8, and Bunting and Floyd, *Harvard*.

5. For the militancy of Gropius's students, see "Letter to the Editors," *Harvard Alumni Bulletin* vol. 53, no. 14 (April 21, 1951), p. 270. Here the design of the Graduate School is defended.

6. Lawrence Anderson to M. H. Floyd, Interview, May 23, 1989. Lawrence Anderson's records and drawings are at the M.I.T. Museum. Although many are executed in the Beaux-Arts program, the palette is pale and an interest in reduction of ornament apparent. See in particular, "Villa on the Coast, Defrasse" (1930) and "A Large Coastal Camp, Defrasse" (1930).

7. See: *Massachusetts Institute of Technology School of Architecture, Courses in Architecture City Planning, Architectural Engineering*, (n.p., c. 1934), pp. 16–18. Anderson's drawing of "Villeneuve-lez-Avignon in the year 1387" (1930), is included. See companion perspective drawing (Plate 1). Many aspects of Anderson's

work in Europe, particularly his seaside Gymnasium, give evidence of exposure to European Modernism. This is suggested in the simplicity of his drawing of the elevation and perspective of Avignon, which also anticipated his interest in urban design.

8. For M.I.T.'s Dean William Emerson, whose drawings are now in the Memorial Library of the Boston Architectural Center, see Goody and Walsh, *Boston Society of Architects 1867–1967*, pp. 85–86. Emerson was dean at M.I.T.'s School of Architecture from 1919–1939 influencing a whole generation of architects including Gordon Bunshaft, Louis Skidmore and John O. Merrill. His publications included the influential *Old Bridges of France* with the French architect Georges Gromort in 1925. The book was published in France by the A.I.A. with a preface by Victor Laloux. It may well have influenced Lawrence Anderson's drawing of Avignon. Emerson trained first at Columbia under William Robert Ware and then spent four years at the Ecole des Beaux-Arts.

9. Shillaber, *M.I.T.*, pp. 81–82.

10. Lawrence Anderson to M. H. Floyd, Interview: 23 May, 1989. I am especially grateful to Professor Anderson for his generosity in answering questions and sharing many ideas with me.

11. See Lawrence Anderson, "Technology," *Journal of Architectural Education*, vol. 16, no. 2 (1961) pp. 51–56. See also John A. Matteo, "Technology in Architecture: A Survey of the Journal of Architectural Education 1947–1961," (directed study, Department of Fine Arts, Tufts University, 1989). Articles addressing the educational direction of architecture toward (1) technology and (2) cultural expression/historical content were examined. Although further analysis of this data will be needed, Matteo's preliminary statistics suggest that technological innovation was the central concern overall throughout the period, but that marked increase in discussion of historic values mounted in tandem with urban renewal 1957–1961, along with a decreasingly strict advocacy of technology.

12. Paul Heyer, *Architects on Architecture, New Directions in America* (New York: Walker & Co., 1966), pp. 224–234. William Wurster files, M.I.T. Museum; Shillaber, *M.I.T.* pp. 89–94; Anderson to Floyd, interview: 23 May, 1989. Wurster returned to Berkeley in 1951 and established there his cherished School of Environmental Design. He was succeeded at M.I.T. by Pietro Belluschi who was also from the Far West and whose work was likewise

of the environmental tradition.

13. Barbara Francis, *The Boston Years of Greene & Greene* (M.A. Thesis, Tufts University, Department of Art History, 1986). For Maybeck see William H. Jordy, *American Buildings and their Architects*, vol. 3: *Progressive and Academic Ideals at the Turn of the Twentieth Century* (Garden City, N.Y.: Doubleday & Company, 1972).

14. For Carlu see Chapter 4.2 Floyd on Dean.

15. The differentiation between Art Deco and the International Style is not made by Richmond. His "Modern" structures, primarily those published in the B.A.C. Yearbook, (1929) are all Art Deco. This style, which flourished in Miami and New York, produced a few good designs in Boston where building opportunity was limited. See Christine Carvajal, "Art Deco in Boston," (M.A. Thesis, Tufts University, Department of Art History, 1983).

16. Rudolf Wittkower, *Art and Architecture in Italy: 1600-1750* (Baltimore, Md.: Penguin Books, 1958) and Anthony Blunt, *Art and Architecture in France: 1500-1700* (Baltimore, Md.: Penguin Books, 1953).

17. Fiske Kimball and George H. Edgell, *A History of Architecture* (New York, 1920) and George H. Edgell, *The American Architecture of To-day* (New York: Scribner's, 1928).

18. H. R. Hitchcock, *The Architecture of H. H. Richardson and His Times* (New York: Museum of Modern Art, 1936).

19. Robert C. Dean to Margaret Henderson Floyd, Interview. Notes that are not otherwise referenced as to the source hereafter are from this interview or subsequent conversations. See also Robert C. Dean *All That He Could Remember* (Boston: By the Author, 1973).

20. Walter Gropius taught under Gropius at the Graduate School of Design at Harvard. He had trained in Vienna and was wholly committed to the Bauhaus initiative. He wrote the program for the new B.A.C. building on Newbury Street.

21. Dean was a renowned draughtsman. He won at least fourteen recorded prizes for drawing at M.I.T. including both the Fontainebleau Prize and the Wheelwright (M.I.T.) Travelling Fellowship. His interest in ironwork at Williamsburg anticipated his later work in steel sculpture. Gropius, presumably because of a childhood accident, could not draw. Adolf Meyer, Marcel Breuer and then "T.A.C." always worked with him.

22. Fiske Kimball, William Graves Perry, Arthur A. Shurcliff and Susan Higginson Nash, "The Restoration of Colonial Williamsburg in Virginia," *The Architectural Record* (New York: F. W. Dodge Corporation, December 1935). Rockefeller's largesse saved the architectural profession in these years. His other program was Rockefeller Center in New York; see Lawrence, Chapter 4.5. Fiske Kimball, director of the Philadelphia Museum of Art was an emi-

nent architectural historian. Among many other works, he had published *American Architecture* (New York: Bobbs-Merrill, 1928).

23. At Williamsburg archeological research occurred before any building was altered or rebuilt. Sixty-six major structures from colonial times were either preserved or restored, eighty-four were reproduced on colonial foundations and four hundred and forty-two modern buildings demolished, while eighteen others were moved out of the colonial site. Before World War I, painstaking restorations of the House of Seven Gables in Salem, the Paul Revere House and Old State House in Boston, had been completed by Joseph Chandler; the Society for the Preservation of New England Antiquities had been founded by William Sumner Appleton in 1926, making Boston the center for architectural restoration expertise at that time.

24. Bunting and Floyd, *Harvard*, Chapter 6, passim. At Longfellow Hall (1939) Perry, Shaw & Hepburn exchanged the granite of Bulfinch's University Hall in Harvard Yard for soft, waterstruck Harvard brick; Arthur Shurcliff proposed the plan of Radcliffe Yard, a project on which Kenneth Conant had worked as a student. See Coolidge, Chapter 4.1. See also Hope Cushing, "Arthur Shurcliff" (Ph.D. Dissertation, Boston University, 1989).

25. Dean, *All That He Could Remember*, p. 52. Dean commended a wide range of architecture idioms, which ranged from the Colonial Revival to the Modern style. He had visited Gropius's Bauhaus in Dessau and also seen early work of Le Corbusier when in Europe and was unimpressed. The Ruskinian morality of the Bauhaus was irrelevant to Dean; in eighteenth-century colonial architecture, structure was seldom revealed, wood was habitually cut and scored or marbled to give the "false" illusion of stone and the classical language of architecture was respected. See Stubbins, Chapter 4.6.

26. See Bunting and Floyd, *Harvard*, pp. 211-215 and Chapter 9. In Harvard Yard, Perry, Shaw & Hepburn's Houghton Library is the last jewel of the Colonial Revival. Certainly the afterburner of Williamsburg were the activities of Robert Dean as the firm's delineator and soon-to-be partner. The curved Federal entrance and staircase of Houghton Library, a high point of refinement, expressed in architecture the spirit of Americanism that erupted at Harvard, at the Tercentennial in 1936. In 1956 Perry, Shaw, Hepburn & Dean won the commission for both the Aldrich and Kresge Halls at Harvard Business School.

27. Lawrence Anderson, who knew him well, suggests that Gropius never really understood Harvard politics, having been accustomed to the autonomy of the Bauhaus.

28. Bunting and Floyd, *Harvard*, pp. 216-217. The relationship between Harvard and Gropius must have been extremely strained,

despite the social overtures made by Harry Shepley and his family to the Gropius's. Hugh Shepley to Margaret Henderson Floyd, interview: 24 May 1989. Even the building of Lamont Library (1947), the first Modern structure in Harvard Yard, was entrusted not to Gropius, but to Coolidge, Shepley, Bulfinch & Abbott who remained firmly in place as Harvard's house architects. Recognizing that Modernism was in the wind, they shifted to a Modern style but used Harvard brick for the exterior, retaining Alvar Aalto (rather than Gropius) to design the interior reading room.

29. "I was fired, you know, from Allen & Collens in 1929 when I was designing the Newton Town Hall because I thought their design was not honest and wouldn't keep quiet. Of course that was before I knew anything about Colonial design, because Carlu had sneered at it." Dean, *All That He Could Remember*, p. 56. Harold Willis and Daland Chandler of Allen & Collens, Boston's other major ecclesiastical firm besides Ralph Adams Cram, later became Dean's friends. It was Willis who suggested that Dean, who loved to ride, should join the National Guard 110th cavalry. But he joined instead battery A of the 101st Field Artillery, led by Theodore Storer. This was Dean's first real means of growing into the city of Boston where he had always felt like a stranger.

30. Dean, *All That He Could Remember*, p. 20–22. Dean worked to prepare in Memphis with Charles Mahan in 1921, beginning to draw with James Broadwell. Here he got the incentive for M.I.T. Dean copied drawings of Bertram Grovesnor Goodhue at this time. With academic deficiencies on both the S.A.T. and M.I.T. entrance exams, Dean's forthright position upon his arrival in Boston that M.I.T. could not get rid of him, and had better let him in sooner than later, prevailed.

31. "Mural Decorations in the Ritz Carlton Hotel. Boston," *Architectural Record*, 63: (1926), 178–179.

32. Isabelle Gournay, "Architecture at the Fontainebleau School of Fine Arts 1923–1939," *Journal of the Society of Architectural Historians*, 45 (September, 1986): 270–285. The Fontainebleau School was closely interfaced with M.I.T. Founded after the war as the Bellevue School where Lloyd Warren taught soldiers, Victor Laloux was also one of the teachers. With Dean William Emerson of M.I.T., Laloux authored *Historic Bridges of France* in 1929, published by the A.I.A. Dean arrived in the first wave of official Fontainebleau students. Jacques Carlu was a principal design instructor there, and head of design at M.I.T., 1924–1930.

33. Dean was in charge of an experimental project at M.I.T. for students to design a house that would then be sold. The project eventually aborted but was of great interest while it lasted over several years.

34. The spare and yet romantic style of Aalto

had already gained nationwide acclaim for the Finnish Pavillions at the 1938 Exposition in Paris and at the 1939 World's Fair in New York, and brought him to M.I.T. Aalto's own clerk of the works remained in Boston to work with Perry, Shaw, Hepburn & Dean during completion of Baker House.

35. Robert C. Dean, "History of Perry Dean Rogers & Partners," 1983 Typescript. In 1941 Dean had resigned his new partnership to enlist, emerging from the Army in 1945 as a colonel becoming a brigadier general in 1948 with Bronze Star, Croix-de-Guerres and the Order of Orange Nassau from the Netherlands. His military honors may have brought his firm the commission for the American Memorial Cemetery and Memorial at Cambridge, England. This he designed in 1947–1954, with Olmsted Brothers as landscape architects.

36. Royal Barry Wills, "The House of Tomorrow" 1939 Typescript, Personal Files of Royal Barry Wills.

37. Royal Barry Wills, *Houses Have Funny Bones*, p. 27. His engineering education was extended through on-site observation of colonial buildings, many of which, like the Parson Capen House (1783) in Topsfield, were then being restored.

38. David Gebhard, "The American Colonial Revival in the 1930s," *Winterthur Portfolio* 22 (Summer/Autumn 1987). See also Arnold Nicholson, "The Big Man in Small Houses," *The Saturday Evening Post* (March 29, 1958), pp. 36–56 passim. The movement was accompanied by a groundswell of public interest nationwide and an accompanying bibliography. For example the yearbooks of the B.A.C. cited in Chapter 1 that were available around the time that Wills was at M.I.T. were augmented with subsidized publications relied upon by the builder and architect as pattern books, as had been the habit of the colonial housewright.

39. See James M. Corner and E. E. Soderholtz, *Examples of Domestic Colonial Architecture in New England* (Boston: Boston Architectural Club, 1891).

40. Royal Barry Wills, *Houses Have Funny Bones*, pp. 31–38. His own home in Winchester had a staircase and other elements derived from the Parson Capen House in Topsfield (1783), then being restored. Here and in many higher-budget communities, he created the image of the American home.

41. P. Irving Schwarz, ed., 1926 *Herald-Traveler Book of Homes* (Boston: The Boston Publishing Company, 1926), passim; P. I. Prentice, ed., "Royal Barry Wills, 1895–1962," *House and Home*, vol. 21, no. 2 (February 1962), pp. 105–115; P. I. Prentice, ed., "The New England Tradition and Royal Barry Wills," *House and Home* (February 1960), pp. 97–109; P. Irving Schwarz, ed., 1925 *Herald Traveler: The Book of Homes* (Boston: The Boston Publishing Co., 1925), passim; Royal Barry Wills and Associates, "Residential Renaissance," *New*

in 1954 when he first arrived in Minneapolis from Boston.

62. Hugh Stubbins to M. H. Floyd, Interview: 3 February, 1989. Notes not otherwise referenced as to source hereafter are from this interview.

63. He was not unfamiliar with the city, but unsure of his place in the Harvard constituency. Stubbins's family had business interests in Boston and he had visited here before, unlike Robert C. Dean, who arrived from the South without preparation.

64. Paul Heyer, *Architects on Architecture: New Directions in America* (New York: Walker and Company, 1966), pp. 215–223. Stubbins's approach to design places the client's needs first. Notwithstanding, he has been able to produce strong designs. Some of these competitions were mounted by *House and Garden* and other shelter magazines and included weekend conjunctive competitions for students from Harvard Graduate School of Design, M.I.T. and the B.A.C., sponsored by the Boston Society of Architects that awarded sought-after \$100 prizes.

65. Stubbins and Wills agreed, for example, on the quality of a Peerless Roadster which Stubbins induced Wills to purchase for Mrs. Wills for \$50 (and which shortly was passed on to him for \$10). Since the nineteenth century, Boston architects have had a particular affinity for sailing the New England coast; Stubbins is one of a long line of such men. This interest may have kept Stubbins in Boston, when he was offered the design position at Skidmore, Owings & Merrill in New York, for he preferred the idea of his own office and the smaller urban scale of Boston. Stubbins's interest in the environmental aspect of architecture makes his work a present continuation of the vision of H. H. Richardson and Frederick Law Olmsted and the American landscape tradition despite the monumentality of his urban structures.

66. Dianne M. Ludman, *Hugh Stubbins and his Associates: The First Fifty Years* (Boston: The Stubbins Associates, 1986). See Douglas W. Bryant, Exhibition Catalogue (Cambridge: Harvard University Graduate School of Design, 1986), pp. vii–ix.

67. Leaving the Wills office in 1936, Stubbins established practice first with Mark Peter in Boston. He then briefly joined a large firm in his native Birmingham.

68. Stubbins taught Paul Rudolph, Philip Johnson, Robert Geddes, Victor Lundy, Araldo

Cossutta, and Henry Cobb among others. I. M. Pei and Jack Myer were in his office. Stubbins was fated to miss a travelling fellowship. Although Haffner sponsored him for Paris, his design was blackballed on structure by Walter Kilham. The impending war and Gropius's invitation caused him to forfeit the Wheelwright. Later, while at Harvard, he headed the Fellowship Committee and was therefore ineligible to compete. He now feels that his education was better because it was wholly American.

69. Working with Edwin Land on homing devices at Polaroid during the war years, Stubbins continued to teach with Gropius, designing independently the Windsor Locks Housing project in Connecticut. Land later commissioned the Polaroid Corporation Building, Route 128 Headquarters and Rowland Institute for Research from Stubbins.

70. Kenzo Tange was also a competitor in the W.H.O. Competition. None of the three architects won but their three entries were the only ones published as interesting in the Geneva Press.

71. Bunting and Floyd, *Harvard*, pp. 257, 260–261, 271–273. Countway and Pusey Libraries are illustrated and discussed.

72. Heyer, *Architects on Architecture*, pp. 222–223, illustrates and discusses the Medical School Library.

73. Bunting and Floyd, *Harvard*, pp. 211–229, illustrates the Shepley Bulfinch work at Harvard, in particular Jean Paul Carlhian's fine design for the Allston Burr Lecture Hall (1948–1953), which was built contemporaneously with Gropius's Graduate Center (also discussed). Carlhian's work has continued to distinguish the Shepley firm, in particular in his designs for the Smithsonian Museum in Washington, D.C. Because his father was in interior design in Paris in the 1920s, and Carlhian was Beaux-Arts trained himself before his enrollment in Gropius's Master's Class at Harvard in 1948, his education was similar to that of Stubbins. Carlhian to Floyd, Interview: fall, 1983.

74. Heyer, *Architects on Architecture*, p. 218.

75. Ludman, *Hugh Stubbins and his Associates*, pp. 95–100. The design of the Federal Reserve Bank was completely under Stubbins's control. This unusual commission resulted in what he feels is his finest work and added a third spectacular U.S. Treasury Building to the Boston skyline.

5 ARCHITECTURAL EDUCATION AND BOSTON: 1960–1989

1. Lawrence B. Anderson, "Technology," *Journal of Architectural Education* vol. 16, no. 2 (1961), pp. 51–56.

2. Josep Lluís Sert, "Welcome Address—The Challenge Ahead," *Journal of Architectural Education*, vol. 10, no. 1 (1954), pp. 3–4.

3. For Flansburgh see Chapter 5.3, note 3. For Sert's house and other work see Paul Heyer, *Architects on Architecture*, pp. 244–255.

4. For Pietro Belluschi, see Heyer, *Architects on Architecture*, pp. 224–233.

5. See *Providence Bulletin* (6 June, 1961).

With experience behind him as consultant for the College Hill project in Providence in 1961 (the first preservation program of the 1960s), Anderson foresaw what would happen to Boston without legislated planning tools.

6. See "Back Bay Plan Wins Approval," *Boston Globe*, 20 February, 1963, quoting Anderson. Ralph Rapson had left Boston.

7. The National Historic Preservation Act was passed in 1966.

8. See Harris, Chapter 5.1. Also "Civic Leaders Ask Back Bay to be Preserved," *Boston Globe*, 7 February, 1963.

9. See Sturgis, Chapter 5.2. The Prudential Center was already in place.

10. The Kennedy Library was erected at Columbia Point, Dorchester by I. M. Pei after Cambridge refused to accept the entire complex. Maybank was invited to design the remaining Kennedy School of Government and Belfer Center in Cambridge. See Chapter 5.4.

11. The effects of demolition of Boston's West End and Pittsburgh's elegant Allegheny area on the north side in the 1950s produced the first two Historic Preservation organizations of that era, Architectural Heritage, Inc. in Boston (See Stahl, Chapter 5.3), and Pittsburgh History and Landmarks Foundation. These pioneering organizations marshalled civic concern early enough to influence urban renewal decision making significantly. Their timely activities have resulted in America's two renaissance cities of the 1980s, where the now valued earlier urban fabric remains intact in many areas.

12. This chapter is excerpted from an article published in the *Harvard Graduate School of Design News*, March 1970, pp. 3-8.

13. Dr. Albert Fein was a professor and director of Urban Studies at Long Island University and from 1966 a Visiting Professor at the Harvard Graduate School of Design until just before his death in the spring of 1989. Hideo Sasaki is now retired from both teaching and full-time practice and resides in Lafayette, California.

14. In 1978 the City and Regional Planning Program was moved to the Kennedy School of Government. At the time of its move it had an enrollment of over 200 students and ten years later it now has only a few students.

15. Lynch also spent a year as a student of Frank Lloyd Wright. (R.S.S.).

16. Lynch's students went on to influential positions, including a transportation chief and also a construction chief for Massachusetts, a director of urban design for Boston's revival, the person who managed Washington's Vietnam War Memorial competition, and a number of other important educators and practitioners. (R.S.S.).

17. Something of what Gropius had started moved to Philadelphia with Holmes Perkins, who became head of the School of Fine Arts at the University of Pennsylvania, and Robert Geddes. They became important participants

in the truly grand plan for that city. This plan was produced in 1963 under the dedicated and politically astute leadership of Edmund N. Bacon, a graduate of the Cranbrook Academy, where the planning philosophy had been established by the Finnish architect, Eliel Saarinen. This Philadelphia experience did come back to Harvard when Wilhelm V. "Willo" von Moltke, Bacon's chief designer, came to head the Urban Design Program from the late 1960s through the 1970s. (R.S.S.).

18. It was to celebrate the 50th year of the Chamber's founding in 1909. (R.S.S.).

19. Ed Logue was a lawyer, a Philadelphia native, who had just made his mark as the Urban Renewal director in New Haven, Connecticut. (R.S.S.).

20. Hugh Morrison, *Louis Sullivan: Prophet of Modern Architecture* (New York: Norton, 1935); Sigfried Giedion, *Space Time and Architecture* (Cambridge: Harvard University Press, 1942).

21. Arcangelo Cascieri, Ron Gourley, Jim Hopkins and Charlie Strickland.

22. John McAndrew, my (Floyd) first professor of architectural history at Wellesley College (see Coolidge, 4.1), an architect and fine scholar who had been involved with the Museum of Modern Art in New York, taught all the post 1750 architectural history courses. He published the award winning *The Open Air Churches of 16th Century Mexico*, (Cambridge: Harvard University Press, 1958). Wellesley hired Stahl and then for seven years Earle Flansburgh (B.Arch. Cornell, 1954) during this period. Flansburgh had followed Stahl to England on a Fulbright fellowship. An award-winning Modern architect, he then worked with "T.A.C.," forming his own firm in the 1960s like Stahl. His house was much publicized; cover, *Architectural Record*, 9 (Sept. 1965): 177-179; *Better Homes and Gardens*, vol. 45, no. 11 (Nov. 1966), pp. 72-75. Flansburgh redesigned the Boston Army Base by Fay, Spoffard & Thorndike, Engineers (1919), on the waterfront in 1986 as the Design Center with Hugh Stubbins Associates doing the interior. Flansburgh and Polly Flansburgh have been active, like F. A. Stahl, in the cause of adaptive re-use as well as new construction. Polly Flansburgh founded and continues to lead the Boston-By-Foot guide training program now in its thirteenth year.

23. Hugh Stubbins was the third partner in the State Street Bank joint venture, although Stahl was designing architect.

24. Chief among the opponents to the removal of these buildings had been Walter Whitehill, Librarian of the Boston Athenaeum; Abbott L. Cummings, director of S.P.N.E.A. and James Lawrence, then president of the Boston Society of Architects; all became valued friends. I had become a very active member of the Beacon Hill Civic Association Board and a Trustee of S.P.N.E.A. (FAS)

25. There, Mother Caroline Putnam had as-

sembled an outstanding art faculty which included Tomie de Paula and Norman la Liberté. I undertook a year long course in modern architecture which continued through 1966. (FAS)

26. A major part of the cost was met by a very low-interest mortgage to the United States government obtained through the efforts of A. Osborne Willauer. (Robert Sturgis)

27. Sanford R. Greenfield, went on to be an important professional in architectural education. Elsie M. Hurst's expertise in financial matters and interest in continuing education has continued at the BAC until her retirement in 1989. (Robert Sturgis)

28. Arcangelo Cascieri to M. H. Floyd, interview: 30 May, 1989. Information not otherwise referenced as to source hereafter is from this interview. See also Arcangelo Cascieri: *Educator and Humanist* (Boston: Boston Architectural Center, 1981). Cascieri's papers are in the Archives of American Art, of the Smithsonian Institution. See also Paul Restuccia, "Arcangelo Cascieri: Administering Angel," *The Boston Monthly*, July, 1981, pp.12–13.

29. Both Pellegrini and Kirschmeyer and other decorative artists were B.A.C. members. Pellegrini, with whom Cascieri studied sculpture, worked at the Irving and Casson Company. Pellegrini advertised himself in the B.A.C. Yearbooks as "of Boston and Florence, Italy" and was accepted as the leader of Classicism in sculptural circles.

30. For St. John the Divine and work of Cram and Goodhue see Richard Oliver, *Bertram Grosvenor Goodhue* (New York, 1982).

31. The metaphor of an entrance is physically realized in the door of the building at 16 Somerset Street which was moved in 1967 and is now the entrance to the offices at 320 Newbury Street, adjacent to the exhibition gallery. Cascieri attributes the door to Kirschmeyer who was a member of the B.A.C.

32. For Cram and Boston sculpture, see Douglas Shand Tucci, *Built in Boston* (Boston: New York Graphic Society, 1978). Kirschmeyer was renowned in the 1920s for his work with Ralph Adams Cram, and this association certainly helped Cascieri make contact with Cram. Cascieri's capability to produce such results as an artist, and to talk with that Boston architectural constituency gave him credibility and enhanced his role at the B.A.C.

33. Taking over as head in 1936, Cascieri within the next decade moved the school into Modernism, while at the same time continuing with Gothic ecclesiastical commissions for Boston College, which was cited by Isidor Richmond as maintaining the status quo. He was simultaneously beginning to design abstract modern pieces on his own. Although these were exhibited at the Museum of Fine Arts and elsewhere, he earned his living as an architectural sculptor while devoting his evenings on a voluntary basis to the B.A.C.

6 ARCHITECTURAL EDUCATION AND BOSTON: THE CENTURY

1. Lawrence B. Anderson, "Technology," *Journal of Architectural Education*, vol. 16, no. 2 (1961), pp. 51–56.

2. *Ibid.*

3. While one regrets the demolition of W. G. Preston's Mechanic's Hall, one of the finest new urban spaces in America resulted.

4. The curved, western portico of Brigham's Mother Church was designed and attached by Cossutta and the Pei office after adjacent structures were demolished, effectively designing the project around the existing jewels and enhancing them in the setting.

5. Richard Haas, *An Architecture of Illusion* (New York: Rizzoli, 1981), pp.74–79,84. Haas had an exhibition at M.I.T. in 1981, "Rooms by three Artists," pp.138–142.

6. See also Peter Blake, *Form Follows Fiasco: Why Modern Architecture Hasn't Worked* (Bos-

ton: Little Brown, 1974), and Gauchat, Chapter 5.6. Haas had done several other major exterior walls in New York, but the B.A.C. continues to be one of his most successful. The style was inspired by Beaux-Arts drawings, but elements of the exposed trusswork spell A.I.A. Blake, who was interim director of the B.A.C. in the 1970s, did much to make the institution visible on a national level through his writing and lecturing. His association with the B.A.C. facilitated the accreditation process for the school. In his *Form Follows Fiasco*, he articulated openly for the first time the end of the Modern movement. His work was followed by that of Tom Wolfe, *From Bauhaus to Our House* and Klaus Herteg (see above Floyd Chapter 5, Introduction, Note 1). Blake's book illustrates Boston in that epoch.

ILLUSTRATION CREDITS

(boldface numbers below indicate the page for each illustration)

Frontispiece John Hancock Building (Henry Cobb and I. M. Pei, 1968–1975) and Copley Square, Boston. Photo: Steve Rosenthal, 1980

2 The Old College, Harvard Hall I, Harvard University, Cambridge (1638–1644): north elevation. Conjectural restoration drawing: H. R. Shurtleff (c. 1933) Harvard University Archives 935.57.

4 Tontine Crescent, Boston (Charles Bulfinch, 1794): plan and elevation. From *Massachusetts Magazine* (November 1794). The Boston Athenaeum

5 Charlestown Navy Yard, Charlestown (laid out by Loammi Baldwin, 1828), seen from drydock no. 2 (1899–1904). Photo: unsigned, undated. The Boston Athenaeum.

6 Customs House, Boston (Ammi B. Young, 1837–1847): plans, elevations, section and outline, exterior and interior perspectives, Hammatt Billings, delineator. National Archives, Washington, D.C. Courtesy of Professor James F. O’Gorman.

7 Amos A. Lawrence House, “Cottage Farm,” Brookline. Drawing by George Minot Dexter, 1849. Dexter’s Drawings Collection, vol. 11, p. 1. The Boston Athenaeum.

9 Old City Hall, School Street, Boston (Bryant & Gilman, 1861–1863). Presentation drawing: J.I.V.H., 1969. Courtesy of Stahl Associates.

11 Memorial Hall, Harvard College, Cambridge (Ware & Van Brunt, 1866–78). Harvard University Archives: HUV 166 (3–5).

13 (top) Rogers Building, M.I.T., Boylston Street, Boston (William Gibbons Preston, 1862). Drawing: W. G. Preston, 1862. The William Gibbons Preston Collection, Fine Arts Department, The Boston Public Library: vol. 1 S nos. 1–41. Reproduced by Courtesy of the Trustees of the Boston Public Library.

13 (bottom) The Drawing Studio Interior: Rogers Building, M.I.T.

Photo: unsigned, c. 1876. The M.I.T. Museum

15 (top) Boston’s leading nineteenth-century architects. From the *Boston Architectural Club Year Book* (Boston: Boston Architectural Club, 1917). The B.A.C. Memorial Library.

15 (bottom) Museum of Fine Arts, Copley Square, Boston (John Hubbard Sturgis, 1870–1876). From Moses King, *King’s Handbook of Boston*, 5th ed. (Cambridge: Moses King, 1883), p. 121.

16 Mechanics Hall, Huntington Avenue, Boston (William Gibbons Preston, 1881). From *American Architect and Building News*, vol. 9 (21 May, 1881): ill. 282. The Boston Athenaeum.

17 Boston Art Club, Dartmouth Street, Boston (William Ralph Emerson, 1881). Photo: Baldwin Coolidge, 1883. The Boston Athenaeum: (photo) AA/B64B6/Cl.b.1883.

18 First Parish Church, Weston (Peabody & Stearns, 1885–1889). Drawing: Robert S. Peabody. The B.A.C. Memorial Library.

21 Italian Garden seen from Lake Waban, Hollis H. Hunnewell Estate, Wellesley (Hollis H. Hunnewell, designer, begun 1850). Photo: unsigned, undated. Frances Loeb Library, Harvard Graduate School of Design: F-22-VS NAB 4727 Wel-Hun 15.

24 Sheep Rest at the Bridge, Franklin Park, Boston (F. L. and J. C. Olmsted, landscape architects, 1885; Shepley, Rutan & Coolidge, architects of Scarborough Bridge, 1891). Photo: Leon Abdalian, c. 1920. Boston Public Library, Print Department. Reproduced by Courtesy of the Trustees of the Boston Public Library.

26 Map of the Buildings and Grounds of the World’s Columbian Exposition, Chicago, Ill. (F. L. and J. C. Olmsted, landscape architects, with Henry Sargent Codman, 1893). From Herbert Howe Bancroft, *The Book of the Fair* (Chicago: The Bancroft Co., Publishers, 1893), p. 54. The Boston Athenaeum.

27 Map of the Metropolitan District of Boston, showing the existing public reservations and the new open spaces. Proposal to the Metropolitan Parks Commission (Charles Eliot, landscape architect, 1893). F. L. Olmsted Historic Site, Brookline.

29 Charles River Basin (Storrow Embankment), Boston (Arthur A. Shurcliff, landscape architect, 1930s). Photo: Bradford Washburn, 1946. Library of Congress, Washington, D.C.

32 Mariemont, near Cincinnati, Ohio (John Nolen, town planner, 1923). From John Nolen, *New Towns for Old*, 1927. Frances Loeb Library, Harvard University Graduate School of Design.

33 The Afternoon Garden, “Naumkeag,” Stockbridge (Fletcher Steele, landscape architect, 1926–1955). From *House and Garden* (July 1947): 68. Frances Loeb Library, Harvard University Graduate School of Design.

36 Carey Cage, Soldiers Field, Harvard University, Cambridge (H. Langford Warren, 1896). Harvard University Archives: HUV 1336 pf.

37 (top) Woman’s Building, World’s Columbian Exposition, Chicago, Ill. (Sophia Hayden with Minerva Parker, 1893). From W. H. Jackson, *Jackson’s Famous Pictures of the World’s Fair* (Chicago: White City Art Company, 1895), unnumbered plate. The Boston Athenaeum.

37 (bottom) Interior, Woman’s Building, World’s Columbian Exposition, Chicago, Ill. (Sophia Hayden with Minerva Parker, 1893). From W. H. Jackson, *Jackson’s Famous Pictures of the World’s Fair* (Chicago: White City Art Company, 1895), unnumbered plate. The Boston Athenaeum.

38 Interior, Commonwealth Hotel, Boston (J. Pickering Putnam, c. 1895). From *American Architect and Building News*, 48 (20 April, 1895): ill. 1008. The Boston Athenaeum.

39 Haddon Hall (J. P. Putnam,

1894) with the First Parish Church (Ware & Van Brunt, 1866), Marlborough Street, Boston. From *American Architect and Building News*, 49 (27 July, 1895): ill. 1022. The Boston Athenaeum.

40 Robinson Hall, Harvard University, Cambridge (Charles McKim, 1902–1904). Harvard News Office: H67C.

42 Memorial Library, Boston Architectural Club, 16 Somerset Street (attributed to F. L. Witton, 1920). Photo: Paul J. Weber, undated. The B.A.C. Memorial Library.

43 Exterior, Boston Architectural Club Building, 16 Somerset Street, Boston (remodelled, 1910). Photo: unsigned, undated. The B.A.C. Memorial Library.

44 Great Hall, Boston Architectural Club, 16 Somerset Street (1910). Photo: unsigned, undated. The B.A.C. Memorial Library.

45 (top left) Staircase, Great Hall, Boston Architectural Club, 16 Somerset Street (1910). Photo: unsigned, undated. The B.A.C. Memorial Library.

45 (top right) Fireplace detail, Great Hall, Boston Architectural Club, 16 Somerset Street (1910). Photo: unsigned, undated. The B.A.C. Memorial Library.

45 (bottom left) Studios, Boston Architectural Club, 16 Somerset Street (1910). Photo: unsigned, undated. The B.A.C. Memorial Library.

45 (bottom right) Entrance Door, Boston Architectural Club (attributed to Johannes Kirschmayer, 1905), now in Boston Architectural Center, 320 Newbury Street. Photo: Clive Russ, 1989.

47 Perkins Institution and Massachusetts School for the Blind, Arsenal Street, Watertown (R. Clipston Sturgis, 1912). From the *Boston Architectural Club Year Book* (Boston: Boston Architectural Club, 1912). The B.A.C. Memorial Library.

48 All Saint’s, Brookline (Cram, Goodhue & Ferguson, 1894–

1926). From the Catalogue of the Architectural Exhibition, Boston Architectural Club and Boston Society of Architects (Boston: Boston Architectural Club, 1899), p. 67. The B.A.C. Memorial Library.

49 (top) Custom House Tower, Boston: Perspective sketch from Boston Harbor (Robert Swain Peabody, 1907–1914). From the Yearbook (Boston: Boston Architectural Club, 1909). The B.A.C. Memorial Library.

49 (bottom) Custom House Square, Boston, with the Grain Exchange Building (Shepley, Rutan & Coolidge, 1892) and the Board of Trade Building (Winslow & Bigelow, 1901). Photo: unsigned, undated. Old House File, The Boston Athenaeum.

50 Plan for Boston Public Library and Copley Square, Boston (Charles McKim, 1888). From *American Architect and Building News* 23 (9 June, 1888), ill. 650. The Boston Athenaeum.

51 (top) Wm. H. Filene's Department Store, Washington and Summer Streets, Boston (D. H. Burnham, 1912). From the *Boston Architectural Club Year Book* (Boston: Boston Architectural Club, 1912). The B.A.C. Memorial Library.

51 (bottom) The Berkeley Building, 460 Boylston Street, Boston (Codman & Despradelle, 1905; restored by Notter, Feingold & Alexander). Photo: Steve Rosenthal, 1988. Courtesy of Notter, Feingold & Alexander.

52 Carnegie Institute and Library, Pittsburgh, Penn. (Longfellow, Alden & Harlow, 1891–1907). From *Artworks of Pittsburgh* (Pittsburgh, 1902), vol. IV, no. 3, plate XIV. Courtesy of the Pittsburgh History and Landmarks Foundation.

53 Fenway Court, The Fenway, Boston (Isabella Stewart Gardner & Willard F. Sears, 1900). Photo: Thomas E. Marr, 1903. The Boston Athenaeum.

57 Lowell House Courtyard, Harvard University, Cambridge (Coolidge, Shepley, Bulfinch & Abbott, 1929). Photo: William M. Rittase. Harvard University Archives: HUV 606 (2–3).

58 BB Chemical Company building, Cambridge (Coolidge, Shepley, Bulfinch & Abbott, 1937). Photo: Paul J. Weber. Courtesy of Shepley Bulfinch Richardson & Abbott.

63 Graduate Center (Walter Gropius, 1949–1953) with the World Tree (Richard Lippold, sculptor, 1953), Harvard University, Cambridge. Harvard University Archives: HUV 212 (1–6).

city Archives: HUV 212 (1–6).

64 Design Research Building, Cambridge (Benjamin Thompson, 1969). Photo: Ezra Stoller, 1969. Courtesy of Benjamin Thompson Assoc., Inc.

65 Flansburgh House, Lincoln, Massachusetts (Earle Flansburgh, 1964). Photo: Louis Reens. Courtesy of Earle Flansburgh.

66 Houghton Library, Harvard University, Cambridge (Perry, Shaw, Hepburn & Dean, 1941). Drawing by Robert C. Dean. Permission of the Houghton Library, Harvard University: pf MS AM, 1964, folder 41.

67 Houghton Library: first-floor plan. Drawing by Robert C. Dean (1941). Permission of the Houghton Library, Harvard University: pf MS AM, 1964, folder 44.

68 "A Footbridge:" elevation, plan and section. Student drawing by Robert C. Dean (1926). The M.I.T. Museum.

70 American Military and Memorial Cemetery, Cambridge, England (Robert C. Dean, 1947–1954). Courtesy of Perry, Dean, Rogers & Partners.

71 Front Elevation, Baker House Dormitory, M.I.T., Cambridge (Alvar Aalto with Perry, Shaw, Hepburn & Dean, 1946–1949). The M.I.T. Museum.

73 "Entrance to an Observatory," (Royal Barry Wills). Student drawing by Royal Barry Wills, 1916. The M.I.T. Museum.

75 Architect's House, Winchester (Royal Barry Wills). From *Royal Barry Wills Associates, More Houses for Good Living* (New York: Architectural Book Publishing Co., 1976), p. 225.

76 Cartoons of Clients. Drawings by Royal Barry Wills, c. 1950. Courtesy of Royal Barry Wills Associates.

77 House Types. Drawings by Royal Barry Wills (1940–1960). From *Royal Barry Wills Associates, More Houses for Good Living* (NY: Architectural Book Publishing Co., 1976), p. 17.

79 "Salamanca Cathedral." Rotch Travelling sketch by Isidor Richmond (1923). From the *Book of the Boston Architectural Club* (Boston: Boston Architectural Club, 1925). The B.A.C. Memorial Library.

80 (top) Motor Mart Garage, Boston (Ralph Harrington Doane, 1927). From the *Year Book of the Boston Architectural Club* (Boston: Boston Architectural Club, 1929),

p. 21. The Boston Athenaeum.

80 (bottom) Battery March Building, formerly Public Services Building, Boston (Harold Field Kellogg, 1928). From the *Year Book of the Boston Architectural Club* (Boston: Boston Architectural Club, 1929), p. 50. The Boston Athenaeum.

84 Gardner Museum Greenhouses, Boston (James Lawrence, 1972). Photo: George Zimberg. Courtesy of James Lawrence.

85 Fire Station, Dedham (James Lawrence, 1950). Photo: George M. Cushing, Jr. Courtesy of James Lawrence.

87 "A Peace Memorial." Preliminary competition design for the 23rd Paris Prize. Student drawing by Lawrence B. Anderson (1930). The M.I.T. Museum.

89 Swimming Pool, M.I.T., Cambridge (Lawrence B. Anderson, 1939). The M.I.T. Museum.

91 Stanley McCormick Hall, M.I.T., Cambridge (Anderson, Beckwith & Haible, Herbert and Elizabeth Beckwith designing partners, 1962–1967): viewed through a window of the Kresge Auditorium (Eero Saarinen, 1953). The M.I.T. Museum.

93 Eastgate Apartments, 100 Memorial Drive, Cambridge (Brown, De Mars, Kennedy, Koch and Rapson, 1951). Photo: Ezra Stoller. Courtesy of Ralph Rapson.

95 (top) U.S. Embassy, Stockholm, Sweden (Ralph Rapson and Associates, Inc., 1953). Photo: Ralph Rapson. Courtesy of Ralph Rapson.

95 (bottom) Tyrone Guthrie Theater, Minneapolis, Minn. (Ralph Rapson and Associates, Inc., 1962). Photo: Ralph Rapson. Courtesy of Ralph Rapson.

98 Congress Hall, Berlin, West Germany (Hugh Stubbins, 1957). Sketch: Hugh Stubbins. Courtesy of Hugh Stubbins Associates.

99 Francis A. Countway Library of Medicine, Harvard Medical School, Boston (Hugh Stubbins, 1965). Photo: Edward Jacoby. Courtesy of Hugh Stubbins Associates.

101 Federal Reserve Bank, Boston (Hugh Stubbins, 1978). Photo: Edward Jacoby. Courtesy of Hugh Stubbins Associates.

104 John Hancock Tower (Henry Cobb and I. M. Pei, 1968–1975) and Trinity Church (H. H. Richardson, 1872–1877),

Boston. Photo: Jonathan Pearlman, 1980.

107 Smithsonian Museum, Washington D.C. (Jean Paul Carlhian, 1986). Photo: Nick Wheeler/Wheeler Photographics, 1988. Courtesy of Shepley Bulfinch Richardson & Abbott.

108 (top) American Academy of Arts and Sciences, Cambridge (Kallmann, McKinnell & Wood, 1985). Drawing, courtesy of Kallmann, McKinnell & Wood.

108 (bottom) Massachusetts Bay Transportation Authority Commuter Line, Ruggles Street Station, Northeastern University, Huntington Avenue, Boston (Stull & Lee, 1987). Photo: Peter Vandenwarker, 1987. Courtesy of Stull & Lee.

113 Sketch for Boston's Downtown Waterfront by Robert S. Sturgis (1959). Courtesy of Robert S. Sturgis.

114 The Architect's Plan for Boston. The Civic Design Committee of the Boston Society of Architects, Robert S. Sturgis Chairman (1959–1962). Photographic negative: George M. Cushing Collection. The Boston Athenaeum.

115 John Hancock Life Insurance Buildings, Boston (left, by Hoyle, Doran & Berry, 1937–1941 and right, by Henry Cobb, designing partner, I. M. Pei, 1967–1975). Photo: Steve Rosenthal.

116 Boston City Hall (Kallmann, McKinnell & Knowles, 1964–1968) and Plaza, Boston. Photo: Cervin Robinson. Courtesy of Kallmann, McKinnell & Wood.

121 State Street Bank Building, Boston (F. A. Stahl, 1961). Presentation Drawing: George Conley. Courtesy of Stahl Associates.

123 Faneuil Hall and Quincy Market Buildings, Boston (rehabilitation proposal by F. A. Stahl, 1969, modified and executed by Benjamin Thompson, 1970–76). Photo: Steve Rosenthal, 1977. Courtesy of Benjamin Thompson Assoc., Inc.

124 Park Street Church, Parish House addition, Park Street, Boston (Stahl Associates, 1974). Presentation Drawing: Jack Hagan, 1969. Courtesy of Stahl Associates.

126 The Belfer Center for the Kennedy School of Government, Harvard University, Cambridge (Architectural Resources Cambridge, Inc., 1979). From *Architectural Record* (June 1979), p. 6.

128 (top) Cabot Intercultural

Centre, Tufts University, Medford (Architectural Resources Cambridge, Inc., 1982). From *Bau-meister* 8 (1982).

128 (bottom) Dolben Library, Mount Hermon School, Northfield, Mass. (Architectural Resources Cambridge, Inc., 1988). From *Architectural Record* (July 1988).

130 Jury with winning entry for the B.A.C. Building Competition, 320 Newbury Street, Boston (1967). Photo: Phokion Karas. Courtesy of John R. Myer.

131 Elevation, Boston Architectural Center, 320 Newbury Street (Ashley, Myer & Associates, 1964–1967). Photo: George Zimberg.

132 Plan, Boston Architectural Center, 320 Newbury Street. Photo: Peter Vanderwarker, 1987. Courtesy of John R. Myer.

134 Exhibition Area of the B.A.C. From *Dedication Book of the Boston Architectural Center* (Boston: Boston Architectural Center, 1966).

135 Massachusetts State Archives and Records Center, Columbia Point, Dorchester (Ar-

rowstreet, Inc., 1978–1985). Photo: Peter Vanderwarker, 1987. Courtesy of John R. Myer.

140 The "Sacred Cows" (Urs Gauchat, 1974). Photo: Clive Russ, 1989. Courtesy of Urs Gauchat.

141 Mural on the west facade of the Boston Architectural Center, 320 Newbury Street (Richard Haas, 1975–1977). The B.A.C. Memorial Library.

143 (top) "A Municipal Railroad Station." Pen, pencil, and watercolor. (B.A.C. Student Thesis, Arcangelo Cascieri, c. 1925). The B.A.C. Memorial Library.

143 (bottom) "An Entrance." Pen, pencil, and watercolor (Arcangelo Cascieri, 1923). The B.A.C. Memorial Library.

145 Interior, Cathedral of St. John the Divine, New York City (Heins & LaFarge, 1893–1911, Ralph Adams Cram, 1911–1942): interior. From the *Boston Architectural Club Year Book for 1920* (Boston: Boston Architectural Club, 1920). The B.A.C. Memorial Library.

147 "Flame of Life." Bronze (Arcangelo Cascieri). Photo: Clive

Russ. Boston Architectural Center.

149 Christian Science Center, Huntington Avenue, Boston (I. M. Pei, Araldo Cossutta, designing architect, 1968). Old House File, The Boston Athenaeum.

150 Church Court, Beacon Street and Massachusetts Avenue, Boston (Graham Gund Associates, 1983). Photo: Steve Rosenthal.

151 Citicorp Center, New York, N.Y. (Hugh Stubbins, 1977). Rendering: Howard Associates. Courtesy of Hugh Stubbins Associates.

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Plate 1 "Villeneuve-lez-Avignon in the year 1387." (Lawrence B. Anderson, 1931). The M.I.T. Museum

Plate 2 Design for Island Stations, "Excelsior," Boston Elevated Railway Co., Boston (Alexander W. Longfellow, Jr., 1897). Drawing: "Excelsior," c. 1897. Photo: Richard Cheek. Courtesy of Paul White.

Plate 3 "A Municipal Observatory." (Robert C. Dean, 1927). Elevation 1/16" to the foot, watercolor, pen and ink. Grade V, Design 4752, Problem 5. First Medal Class A V, Beaux-Arts Institute of Design, N.Y., Municipal Art Society Prize. The M.I.T. Museum.

Plate 4 "Rome." Tempera painting (Jacques Carlu, 1922). The M.I.T. Museum.

Plate 5 "Interior of an Ocean Liner." B.A.C. student project (Joseph DiStefano, 1937). Courtesy of Joseph DiStefano.

Plate 6 Aga Kahn Medical College, Karachi, Pakistan (Payette Associates, Inc. and Mozhan Khadem, design consultant, 1988). Photo: Paul Warchol. Courtesy of Payette Associates, Inc.

Plate 7 Waxman House, Block Island, Rhode Island (Jeremiah Eck, 1987). Photo: Paul Ferrino. Courtesy of Jeremiah Eck.

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ARCHITECTURAL EDUCATION AND BOSTON

CENTENNIAL PUBLICATION OF THE
BOSTON ARCHITECTURAL CENTER 1889–1989

by Margaret Henderson Floyd

with Highlights of 100 years by Architects and Historians

This book probes the context within which the Boston Architectural Center has evolved. Examination of prevailing philosophies of architectural education, earlier and during the past century, reveals the relationship of architectural education to Boston's own development as a city. Published on the occasion of the centennial of the Center (originally known as the Boston Architectural Club), the book provides some intimate views of the three institutions which have established Boston as a center of architectural education: the Massachusetts Institute of Technology established the first school of architecture in the nation here in 1867; Harvard's architectural school was founded in 1893. Seven years later, extending the pioneering practice of Frederick Law Olmsted, whose career and influence is recounted by Cynthia Zaitzevsky, the nation's first degree-granting program of landscape architecture within a university was established at Harvard. Harvard later brought Walter Gropius to head the School of Design (as he named it), effectively injecting Modernism into the American educational mainstream in 1936. Meanwhile, the Boston Architectural Center has been a continuing force for bringing the practicing profession directly into the ongoing process of education. The changing educational environment of the Center, supported by a professional rather than an academic faculty, is of particular interest for it has reflected the stylistic advocacy and convictions, the political events and dialogues of a hundred years in the City of Boston and in American architecture.

Interlacing recorded and remembered history, the Crisis of Modernism is examined through reflections of contemporary observers: Professor John Coolidge, Robert C. Dean, Lawrence B. Anderson, Ralph Rapson, Hugh Stubbins and others contribute insight into the changing theoretical framework of Boston architectural education in the late 1920s and 1930s, relating the events of this period to their later experience.

In the mid-20th century, when the physical fact of Modern architecture and new issues of urban design began to control the shape of the city, a second architectural crisis occurred. The High Spine concept, reminiscences on the rise of historic preservation, reviews of changing architectural objectives in urban environments, and a recapitulation of the competition for the new B.A.C. building on Newbury Street are presented in the words of leading participants in this unfolding urban design story.

The 100 illustrations, 8 color plates, notes and index provide a reference for future explorations of the history of *Architectural Education and Boston*.

AUTHOR

Margaret Henderson Floyd, Ph.D., is Associate Professor and past-chair of the Department of Art, and the History of Art and Architecture at Tufts University. A former scholar of the Radcliffe Institute at Harvard, she completed and edited Bainbridge Bunting's *Harvard: An Architectural History* (1985), is a former board member of the Society of Architectural Historians, and has served on the Library Committee of the Boston Architectural Center since 1980.